Chapter One:
INTRODUCTION TO PSYCHOLOGY
Learning Objectives
By the end of this section, you will be able to:

- Define psychology
- Goals of psychology
- Understand the merits of an education in psychology
- Understand the importance of Wundt and James in the development of psychology
- Appreciate Freud's influence on psychology
- Understand the basic views of Gestalt psychology
- Appreciate the important role that behaviorism played in psychology's history
- Understand basic beliefs of humanism
- Appreciate the diversity of interests within psychology
- Understand basic interests and applications in each of the described areas of psychology
- Demonstrate familiarity with some of the major concepts or important figures in each of the described areas of psychology
- Define research
- Explain different methods of data collection
- Understand the ethics of research

1.1. WHAT IS PSYCHOLOGY?

Definition

Psychology is the scientific study of the behavior of individuals and their mental processes. Let's explore the critical parts of this definition: scientific, behavior, individual, and mental.

- The ***scientific method*** consists of a set of orderly steps used to analyze and solve problems. This method uses objectively collected information as the factual basis for drawing conclusions.
- ***Behavior*** is the means by which organisms adjust to their environment. Behavior is action. The subject matter of psychology largely consists of the observable behavior of humans and other species of animals. Smiling, crying, running, hitting, talking, and touching are some obvious examples of behavior you can observe.
- The subject of psychological analysis is most often an ***individual.***
- Many researchers in psychology also recognize that they cannot understand human actions without also understanding ***mental processes***, the workings of the human mind. Much human activity takes place as private, internal events—thinking, planning, reasoning, creating, and dreaming.

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The Goals of Psychology

The goals of the psychologist conducting basic research are to describe, explain, predict, and control behavior.

- ***Describing What Happens***. The first task in psychology is to make accurate observations about behavior. Behavioral data are reports of observations about the behavior of organisms and the conditions under which the behavior occurs.
- ***Explaining What Happens.*** Explanations in psychology usually recognize that most behavior is influenced by a combination of factors. Often a psychologist's goal is to explain a wide variety of behavior in terms of one ***underlying cause***.
- ***Predicting What Will Happen.*** Predictions in psychology are statements about the ***likelihood*** that a certain behavior will occur or that a given relationship will be found. Thus, if we believe your roommate to be shy, we could confidently predict that he would be uncomfortable when asked to give a speech in front of a large class.
- ***Controlling What Happens***. Control means making behavior happen or not happen. The ability to control behavior is important because it gives psychologists ways of helping people improve the quality of their lives.

Merits of An Education in Psychology

An education in psychology is valuable for a ***number of reasons.***

- Psychology students ***improve critical thinking skills*** and are trained in the use of the scientific method. Critical thinking is the active application of a set of skills to information for the understanding and evaluation of that information. For ***example,*** critical thinking involves maintaining an attitude of ***skepticism***, recognizing internal biases, making use of logical thinking, asking appropriate questions, and making observations.
- Psychology students also can develop ***better communication skills***.
- Psychology students come to understand the ***complex factors that shape one's behavior***. They appreciate the interaction of our biology, our environment, and our experiences in determining who we are and how we will behave.
- They learn about ***basic principles that guide how we think and behave***, and they come to recognize the tremendous diversity that exists across individuals and across cultural boundaries.

1.2. PERSPECTIVES IN PSYCHOLOGY

II. Structuralism

Wilhelm Wundt (1832–1920) was a German scientist who was the ***first*** person to be referred to as a psychologist. Wundt viewed psychology as a ***scientific study of conscious experience***, and he believed that the goal of psychology was to identify components of consciousness and how those components combined to result in our conscious experience. Wundt used ***introspection*** (he called it "***internal perception***"), a process by which someone examines their own conscious experience as objectively as possible, making the human mind like any other aspect of nature that a scientist observed. Wundt established his psychology laboratory at ***the University at Leipzig in 1879***.

However, despite his efforts to train individuals in the process of introspection, this process remained ***highly subjective***, and there was very little agreement between individuals.

III. Functionalism

William James (1842–1910) was the first American psychologist who advocated a different perspective on how psychology should operate. James was introduced to ***Darwin's theory of evolution*** by ***natural selection*** and accepted it as an explanation of an organism's characteristics. ***Key*** to that theory is the ***idea that natural selection leads to organisms that are adapted to their environment,*** including their behavior. ***Adaptation*** means that a trait of an organism has a function for the ***survival and reproduction*** of the individual, because it has been naturally selected. As James saw it, psychology's purpose was to study the function of behavior in the world, and as such, his perspective was known as ***functionalism***. Functionalism ***focused on how mental activities helped an organism fit into its environment.***

IV. Psychoanalytic Theory

Perhaps one of the ***most influential and well-known figures*** in psychology's history was Sigmund Freud. Freud (1856–1939) was an Austrian neurologist who was fascinated by patients suffering from "***hysteria***" and ***neurosis***. Hysteria was a diagnosis for disorders, primarily of women with a wide variety of symptoms, including ***physical symptoms and emotional disturbances,*** none of which had an apparent physical cause. Freud theorized that many of his patients' problems arose from ***the unconscious mind.*** In Freud's view, ***the unconscious mind*** was a storehouse of feelings and urges of which we have no awareness. ***Gaining access to the unconscious,*** then, was crucial to the successful resolution of the patient's problems. According to Freud, the ***unconscious mind could be accessed*** through ***dream analysis*** and examinations of the ***first words*** that came to people's minds, and through seemingly innocent ***slips of the tongue***. ***Psychoanalytic theory*** focuses on the role of a person's unconscious, as well as ***early childhood experiences***, and this particular perspective dominated ***clinical psychology*** for several decades. For ***instance***, many therapists believe strongly in the unconscious and the impact of early childhood experiences on the rest of a person's life.

V. Gestalt Psychology

Max Wertheimer (1880–1943), Kurt Koffka (1886–1941), and Wolfgang Kohler (1887–1967) were advocated Gestalt psychology.

Instead of considering separate parts that make up thinking, Gestalt psychologists concentrated on the '***whole'***. Their slogan is '***the whole is greater than the sum of its parts'***. Gestalt means shape, form or configuration. A major emphasis of Gestalt psychology deals with the fact that although a sensory experience can be broken down into individual parts, how those parts relate to each other as a whole is often what the individual responds ***to in perception***.

VI. Behaviorism

John B. Watson (1878–1958) was an influential American psychologist whose most famous work occurred during the early 20th century at ***Johns Hopkins University.*** Watson preferred to focus directly on ***observable behavior*** and try to bring that behavior under control. Watson was a major proponent of ***shifting the focus of psychology from the mind to behavior,*** and this approach of observing and controlling behavior came to be known as ***behaviorism***.

- Behaviorism commonly used animals in experiments under the ***assumption*** that what was learned using animal models could, to some degree, be applied to human behavior**.**

- Behaviorism ***dominated experimental psychology*** for several decades, and its influence can still be felt today.
- Behaviorism is largely responsible for establishing psychology as a ***scientific discipline*** through its objective methods and especially experimentation.
- ***Behavior modification*** is commonly used in classroom settings. Behaviorism has also led to research on environmental influences on human behavior.

B. F. Skinner (1904–1990) was an American psychologist. Like Watson, Skinner was a behaviorist, and he concentrated on how ***behavior was affected by its consequences***. Therefore, Skinner spoke of ***reinforcement and punishment*** as major factors in driving behavior.

VII. Humanism

Humanism is a perspective within psychology that ***emphasizes the potential for good that is innate to all humans.*** Two of the most well-known proponents of humanistic psychology are Abraham Maslow and Carl Rogers.

Abraham Maslow (1908–1970) was an American psychologist who is best known for proposing a ***hierarchy of human needs*** in motivating behavior.

- Maslow asserted that so long as ***basic needs necessary*** for survival were met (e.g., food, water, shelter), higher-level needs (e.g., social needs) would begin to ***motivate behavior.***
- According to Maslow, the highest-level needs relate to ***self-actualization***, a process by which we ***achieve our full potential***.
- The focus on the ***positive aspects of human nature*** that are characteristic of the humanistic perspective is evident.

Carl Rogers (1902–1987) was also an American psychologist who, like Maslow, emphasized the ***potential for good*** that exists within all people. Rogers used a therapeutic technique known as ***client centered therapy*** in helping his clients deal with problematic issues that resulted in their seeking psychotherapy.

1.3. SOME BRANCHES OF PSYCHOLOGY (FIELDS OF SPECIALIZATION)

1. Biopsychology

As the name suggests, ***biopsychology*** explores how our biology influences our behavior. Many biological psychologists ***want to understand how the structure and function of the nervous system is related to behavior.*** Biopsychology typically focuses on the ***immediate causes of behavior based in the physiology*** of a human or other animal.

2. Cognitive Psychology

The ***cognitive revolution*** created drive for psychologists to focus their attention ***on better understanding the mind and mental processes that underlie behavior***. Thus, ***cognitive psychology*** is the area of psychology that focuses on studying cognitions, or thoughts, and their relationship to our experiences and our actions.

3. Developmental Psychology

Developmental psychology is the scientific study of development ***across a lifespan.*** Developmental psychologists are interested in processes related to the physical changes associated with aging, as they also focus on changes in cognitive skills, moral reasoning, social behavior, and other psychological attributes.

4. Personality Psychology

Personality psychology focuses on patterns of thoughts and behaviors that make each individual ***unique.*** Rather than explaining how personality arises, research is focused on identifying ***personality traits,*** measuring these traits, and determining how these traits interact in a particular context to determine how a person will behave in any given situation.

5. Social Psychology

Social psychology focuses on ***how we interact with and relate to others***. Social psychologists conduct research on a wide variety of topics that include differences in ***how we explain our own behavior versus how we explain the behaviors of others,*** prejudice, and attraction, and how we resolve interpersonal conflicts.

6. Industrial-Organizational Psychology

Industrial-Organizational psychology ***(I-O psychology***) is a subfield of psychology that applies psychological theories, principles, and research findings in industrial and organizational settings. I-O psychologists are often involved in issues related to personnel management, organizational structure, and workplace environment. Businesses often seek the aid of I-O psychologists to make the best hiring decisions as well as to create an environment that results in high levels of employee productivity and efficiency.

7. Health Psychology

Health psychology focuses on how health is affected by the interaction of biological, psychological, and sociocultural factors. This particular approach is known as the ***biopsychosocial model***. Health psychologists are interested in helping individuals achieve better health through public policy, education, intervention, and research. They may research effective ways to motivate people to address patterns of behavior that contribute to poorer health.

8. Clinical Psychology

Clinical psychology is the area of psychology that focuses on the ***diagnosis*** and ***treatment*** of ***psychological disorders*** and other problematic patterns of behavior. As such, it is generally considered to be a more applied area within psychology; however, some clinicians are also actively engaged in scientific research.

9. Counseling Psychology

Counseling psychology is a similar discipline to clinical psychology that focuses on emotional, social, vocational, and health related outcomes in individuals who are considered ***psychologically healthy***.

10. **Forensic Psychology**

Forensic psychology is a branch of psychology that deals questions of psychology as they arise in the ***context of the justice system***. For ***example***, forensic psychologists will assess a person's competency to stand trial, assess the state of mind of a defendant, act as consultants on child custody cases, consult on sentencing and treatment recommendations, and advise on issues such as eyewitness testimony and children's testimony.

1.4. RESEARCH METHODS

Definitions and General Remarks

Theodoson and Teodoson in their modern dictionary of sociology (N.Y, 1969) defined research as ***'any honest attempt to study a problem systematically or to add to man's knowledge of a problem.***'

Processes of The Research

Regardless of the problem type the general methods employed in psychological research are:

- Identifying and clearly stating the problem;
- Generating hypothesis;
- Deciding the research procedure;
- Decide the type of data;
- Gather the Data;
- Analyze the data by means of statistical techniques.
- Conclusion and recommendations.

Basic Terms and Concepts related to Research

- ***Theory*** is a general idea or framework that helps to organize what we know and want to know about a topic.
- ***Basic research*** is a research designed to ***test theory*** to expand the borders of knowledge.
- ***Applied research*** is a research designed to address a practical problem. A researcher might try to discover a good way to reduce smoking, or increase literacy, or reduce violent crime.
- ***Hypothesis*** is a testable idea derived from a theory. It is predictable statement between two variables.
- ***Population*** is the group of people that one is interested in studying.
- ***Sample*** is of a group of people, the subset that participates in one's study.
- ***A variable*** is something that undergoes changes. If the variable in the research is, for ***example***, intensity of a tone, intensity is the variable. There are two major types of variables.
- ***Independent Variable*** is any factor whose change is expected to affect the event that is being studied.
- ***Dependent Variable*** is the event that is expected to change when the independent variable is altered.

Suppose a doctor wants to investigate the effect on tooth decay of the addition of fluoride to drinking water. The independent variable in this research design is addition of fluoride. Tooth decay is the dependent variable.

Methods of Data Collection

1. **Naturalistic Observation**

Naturalistic observation is research that involves observing behavior in its natural setting. Suppose you want to know how marriage ceremonies are conducted in Ethiopia.

2. **Case Study (Clinical Method)**

Case study is an in-depth investigation of a single person or small group of people. Case studies are typically conducted because there is something distinctive and potentially informative about the or group. For ***example***, The unit of study can be a family, a group of delinquents, dropouts and teenagers.

3. **The Survey Method**

It is a method of getting information regarding peoples' characteristics attitudes, opinions or behavior by asking them all the same question.

Example: the central statistical office (CSO) conducts a large-scale survey. It enables to establish the size, distribution and characteristics of the population.

- Survey research tells us a *great deal about people*. Questioning every household produces accurate information.
- People sometimes give ***misleading answers*** either deliberately or accidentally; particularly if the concern is a touching area, such as sex, money or race relations.

4. **Correlational Research**

Correlational research seeks to discover ***if two variables are correlated,*** that is, related or associated in some way.

- One reason to conduct correlational research is that correlations ***help us to predict*** one variable from another. For ***example***, people who work in university admissions might be interested to know whether ***GSLE scores*** are correlated with college performance.
- Correlations can range from ***-1 to 1.***
- If a correlation is a ***positive*** number, this indicates that the ***two variables rise and fall together.*** For ***example***, we might expect time spent studying and grades to be positively correlated. As studying goes up, grades go up. As studying goes down, grades go down.
- If a correlation is a ***negative*** number, this indicates that the ***variables move in opposite directions***. As one variable rises, the other falls. For ***example***, we might expect skipping classes and grades to be negatively correlated. As the number of classes skipped goes up, grades go down. But, as the number of classes skipped goes down, grades go up.
- If two variables are ***correlated zero***, then they are uncorrelated or unrelated, so knowing one tells nothing at all about the other.
- ***Correlation does not imply causation.*** If we know two variables are correlated, this does not indicate that one of them causes the other.

For ***example,*** suppose we find that ***self-esteem*** and ***GPA*** are positively correlated. It would not be surprising to hear someone say that we need to build up students' esteem because then their grades will go up. But the idea that raising esteem will cause an increase in GPA would only make sense if esteem causes GPA, and there are at ***least two reasons*** why we cannot conclude this from a correlation.

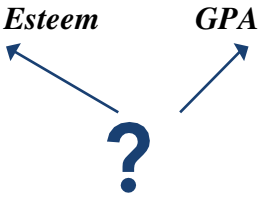
- First, the ***direction problem*** is that, if two variables are correlated, we cannot know which might cause which. For ***example,*** if esteem and GPA are correlated, esteem might cause GPA, but GPA might cause esteem.
- The ***third variable problem*** has to do with the fact that two variables could be correlated and ***neither might cause the other.*** For ***example***, if esteem and GPA are correlated, it might be that esteem doesn't cause GPA and GPA doesn't cause esteem either. Then how can they be correlated? They can be correlated because both are caused ***by something else, some third variable.*** Perhaps good nutrition causes people to have high esteem and also causes them to get good grades.

Correlation is not Causation

Example: A correlation between self-esteem and GPA does not indicate that esteem causes GPA because:

Direction problem: Esteem could cause GPA but GPA could cause esteem

Third variable problem: Some other variable could cause both



5. The Experimental Method

Experimental research seeks to discover if ***one variable causes another.*** We often want to know this. For ***example***, does violent TV increase aggression?

- ***Extraneous variables*** that can affect the result of the experiment can be controlled.
- In experimental research method there are ***two groups***.
- ***Experimental group*** are the participants who receive the factor (e.g., a drug, a violent film) that the researcher is investigating.
- ***Control group*** are the participants who *do not receive the factor* (e.g., a drug, a violent film) that the researcher is investigating. The control group is used as a ***standard*** or ***baseline against*** which the experimental group is compared.

APA Ethical Guidelines

You should know and understand the ethical guidelines established by the APA (***American Psychological Association)*** for human research.

Research involving human subjects must meet the following standards**:**

1. ***No coercion***: Participation should be ***voluntary.***
2. ***Informed consent***: Participants must know that they are involved in research and give ***their consent.***
3. ***Anonymity*** or ***confidentiality***: Participants' privacy must be protected. Their identities and actions must not be revealed by the researcher.
4. ***Risk:*** Participants cannot be placed at significant mental or physical risk. Research that might cause someone long-term mental or physical harm must be avoided.
5. ***Debriefing***: After the study, participants should be told the purpose of the study and provided with ways to contact the researchers about the results. When research involves deception, it is particularly important to conduct a thorough debriefing.

Chapter Two
SENSATION AND PERCEPTION
Learning Objectives
By the end of this section, you will be able to:

- Distinguish between sensation and perception
- Describe the basic concepts related to sensation and perception
- Understand the importance implication of signal detection theory
- Describe the basic concepts related to sensation and perception
- Discuss the roles attention, motivation, and sensory adaptation play in perception
- Explain the figure-ground relationship
- Define Gestalt principles of grouping
- Describe how perceptual set is influenced by an individual's characteristics and mental state

2.1. SENSATION VERUS PERCEPTION

Sensation and perception are ***fundamental topics.*** Because our behavior is so much a reflection of how we react to and interpret stimuli from the world around us. Sensation and perception are the ***starting points*** for all other psychological processes. They supply the data we use for learning and remembering for thinking and problem solving, for communicating with others, for experiencing emotions, and for being aware of ourselves. ***Without sensation and perception*** we would not form thoughts or feelings.

Basic Terms and Concepts related to Sensation and Perception

To have a better understanding of the subject matter of sensation and perception, we need to define related basic terms.

1. ***Stimulus:*** It is a source of physical energy that produces a response in the sense organs. The energy could be sound waves, light waves, and heat pressure to which an organism is capable of responding. A sensation is a response to that energy by a sensory system. Stimulus and sensation have cause and effect relationship.
   Example: Color----- visual stimulation
   Musical pitch------auditory stimulation
   Example: brightness, loudness

Stimuli vary in both type and intensity. Different types of stimuli activate ***different sense organs.***

2. ***Response***: It is any reaction of an organism to or in the presence of a stimulus.
3. ***Sensation:*** It is the process by which an organism's sense organs respond to a stimulus. It is the process whereby stimulation of receptor cells (in the eyes, ears, nose, mouth, and surface of the skin) sends nerve impulses to the brain.
4. ***Sense Receptors:*** specialized cells that convert physical energy in the environment into electrical energy that can be transmitted to the brain.
5. ***Transduction:*** The conversion of one form of energy to another.
6. ***Perception:*** It is the process whereby the brain interprets sensations, giving information order and meaning. It takes into account experiences stored in our memory, the context in which the sensation occurs and our internal state (our emotions and motivations). It is the process of forming hypotheses about what the senses tell us. Example: Hearing sounds and seeing colors are sensory processes; whereas, listening sweet music and detecting depth in a two dimensional picture

are perceptual processes. Without sensation of some kind perception could not occur.

There are Several Factors that affect our Perception. Some of these are:

A. Context and Expectation

In an experiment by Bruner and Minturn (1955, cited by Baron), participants were shown sequences either of letters or of numbers, for ***example:***

C D E F G H or
8 9 10 11 12

When perceived with a figure/number I3 that could be either B or 13, those who had seen the sequence or letters tended to perceive it as B, while those who had seen the numbers perceived it as 13. The context in which it was seen produced expectation and induced a particular set.

B. Attention

Attention ***plays a significant role*** in determining what is sensed versus what is perceived. Imagine you are at a party full of music, chatter, and laughter. You get involved in an interesting conversation with a friend, and you tune out all the background noise. If someone interrupted you to ask what song had just finished playing, you would probably be unable to answer that question.

C. Motivation

Motivation can also affect perception. Have you ever been expecting a really important phone call and, while taking a shower, you think you hear the phone ringing, only to discover that it is not?

D. Beliefs, Values, Prejudices, Expectations and Life Experiences

Our perceptions can also be affected by our beliefs, values, prejudices, expectations, and life experiences. The shared experiences of people within a given cultural context can have pronounced effects on perception.

E. Personality

Personality might affect perception. Individuals who hold positive attitudes toward reduced-fat foods are more likely to rate foods labeled as reduced fat as tasting better than people who have less positive attitudes about these products (Aaron, Mela, & Evans, 1994).

7. ***Psychophysics*** studies the relationship between the intensity of a stimulus and its sensory response. In other words it studies the relationship between the physical nature of stimuli and people's sensory responses to them.
8. ***Absolute Threshold:*** It is the smallest intensity of a stimulus that must be present for it to be detected. For a stimulus to be detected by our sense organs it must become strong enough.

The following research findings on absolute threshold are taken from the works of Galanter (1962).

- ***Sight:*** a candle flame can be seen 30 miles away on a dark, clear night.
- ***Hearing:*** the ticking of a watch can be heard 20 feet away under quiet conditions.
- ***Taste:*** A teaspoon of sugar can be detected in nine liters of water
- ***Smell:*** A drop of perfume can be detected when one drop is present in a three room apartment.

- ***Touch:*** The falling of a bee's wing from a distance of one centimeter can be felt on a cheek.

9. ***Difference Threshold:*** it is the smallest detectable difference between two stimuli. A noticeable difference depends on the value of the initial intensity of the stimulus. ***Example:*** A person in a quiet room is more sensitive to the ringing of a telephone than a person in a noisy room. In order to produce the same amount of sensitivity in a noisy room, the ring has to be very loud.
10. ***Sensory Adaptation:*** It is an adjustment in sensory capacity following long period of exposure to stimuli. ***Example:*** Repeated hearing of a rock musical sound regularly makes a person to adjust as if it were softer.
11. ***Attention:*** Attention is a general term referring to the selective aspects of perception which function so that any instant an organism focuses on certain features of the environment to the exclusion of other features.

Factors which determine whether or not we pay attention to a stimulus are:

- ***Intensity:*** a bright color will attract us more than a dull one.
- ***Size***: a large thing is more likely to catch our attention than something small.
- ***Duration of repetition:*** a quickly running stimulus will not catch our attention as easily as one, which persists or is repeated.
- ***Emotional content:*** a stimulus, which creates emotional feeling, attracts our attention more than a neutral one.
- ***Suddenness or novelty:*** sudden stimulus is likely to catch our attention more easily than one we have been expecting.
- ***Contrast:*** contrasting stimulus will attract attention more easily than those which are similar to each other.
- ***Movement:*** a stimulus, which moves, is more likely to attract attention than something stationary.

Distinction between Sensation and Perception

- While our sensory receptors are constantly collecting information from the environment, it is ultimately how we interpret that information that affects how we interact with the world.
- ***Perception*** refers to the way sensory information is organized, interpreted, and consciously experienced.
- How we interpret those sensations is ***influenced by*** our available knowledge, our experiences, and our thoughts.
- Sensation is a *physical process*, whereas perception is ***psychological***.

2.2. THEORIES RELATED TO SENSATION AND PERCEPTION

I. Signal Detection Theory

This theory addresses the role of psychological factors in detecting stimuli.

- Is this person HIV-positive?
- Is the person lying?
- Is this athlete using drugs?
- Will this college applicant succeed?

For instance, physicians who are seeking to identify the presence of a tumor in an x-ray are influenced by their expectations, knowledge, and experience with patients. From this we can understand that the ability to detect a stimulus depends not only on the type and intensity of the stimulus but also on psychological factors.

People can make ***mistakes*** in their attempt to detect a stimulus. According to signal detection theory there are two kinds of errors made by people in their attempt to detect a stimulus. These are:

- Reporting a stimulus as existing when it is non-existent;
- Reporting a stimulus as non-existent when it actually exists;

In such conditions, using signal detection theory, psychologists are able to obtain an understanding of how observer's expectations, motivations, and judgment affect individual's ability to detect a stimulus.

Signal detection theory has practical applications, such as increasing air traffic controller accuracy. Controllers need to be able to detect planes among many signals (blips) that appear on the radar screen and follow those planes as they move through the sky.

II. Directions in perception

The processing of Perception proceeds along ***two directions***. These are top-down processing and bottom-up processing.

1. Top- down processing

The top- down processing of ***perception is guided by a higher-level of knowledge, experience, expectations, and motivations.*** Patterns can be recognized easily and rapidly, because we expect certain shapes to be found in certain locations.

***Example*:** When we read a sentence, we perceive that sentence with the missing letters in it. This is because we had past experiences. Therefore, it is not important to decode the meaning of each word. If an additional word is inserted, we may not notice that it is there:

STUDENTS ARE EXPECTED TO
PUTOFF THEIR MOBILES
BEFOR THEY ENTER THE
THE LIBRARY.

In this example 'the' is often not noticed at all.

Our expectation also plays a role in what we are reading. If a student**,** for example, is reading a text in psychology material, he expects sentences from psychology not lines from a poem.

In the top- down processing, the context in which we perceive objects is important. The figure "**I3",** for example, is perceived as the letter **B** in a row that consists of the letters **A** through **F.** The same figure can be perceived as the number **13** in a row that contains the numbers **10** through **14.** Therefore, our perception of the figure is affected by our expectations about the two sequences.

A 13 C D E F
10 11 12 B 14

2. Bottom-up processing

The bottom-up of perception consists of recognizing and processing information about the individual components of the stimuli.

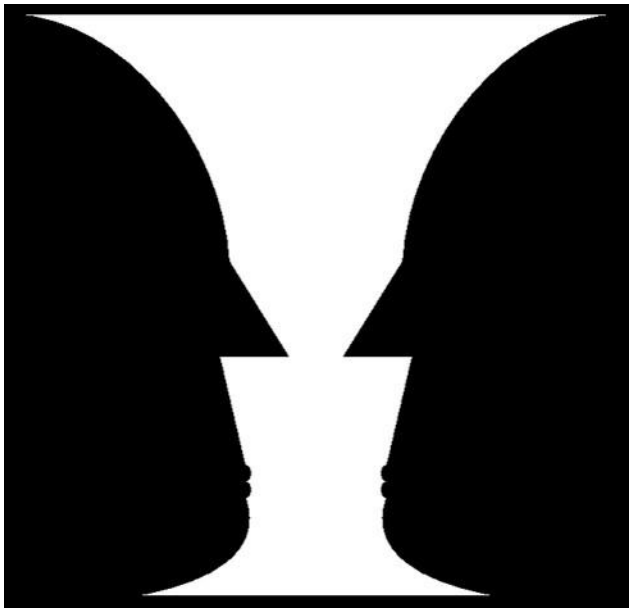
In the above mentioned example it may be difficult to recognize the sentence without being able to perceive the individual shapes that make up the letters. Therefore, partly perception requires the recognition of each separate letters.

Conclusion: top-down and bottom- up processing occur simultaneously and interact with each other, in our perception of the world around us.

III. Gestalt Principles of Perception

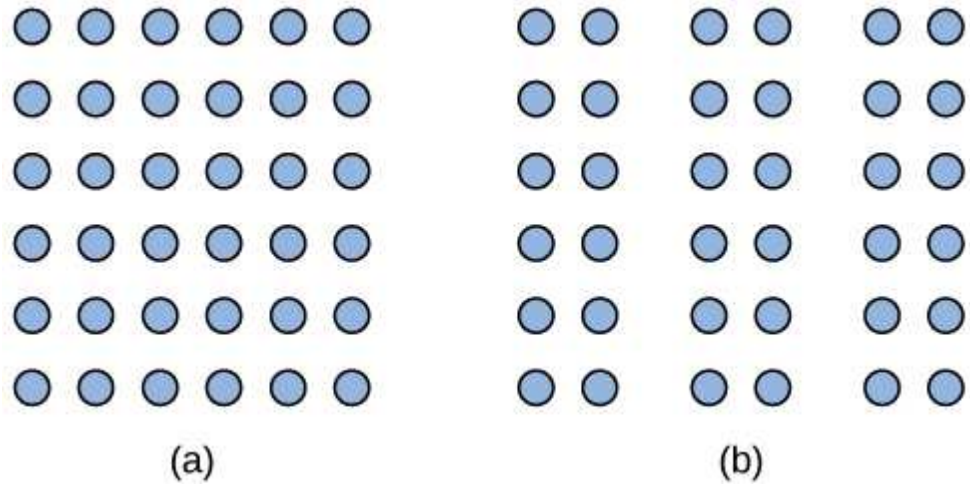
The word ***gestalt*** literally means ***form*** or ***pattern***, but its use reflects the idea that the ***whole is different from the sum of its parts***. Gestalt psychologists translated these predictable ways into principles by which we organize sensory information.

1. The **figure-ground relationship**: We tend to ***segment*** our visual world into figure and ground. ***Figure*** is the object or person that is the focus of the visual field, while the ***ground*** is the background. Our perception can vary tremendously, depending on what is perceived as figure and what is perceived as ground.



The concept of figure-ground relationship explains why this image can be perceived either as a vase or as a pair of faces.

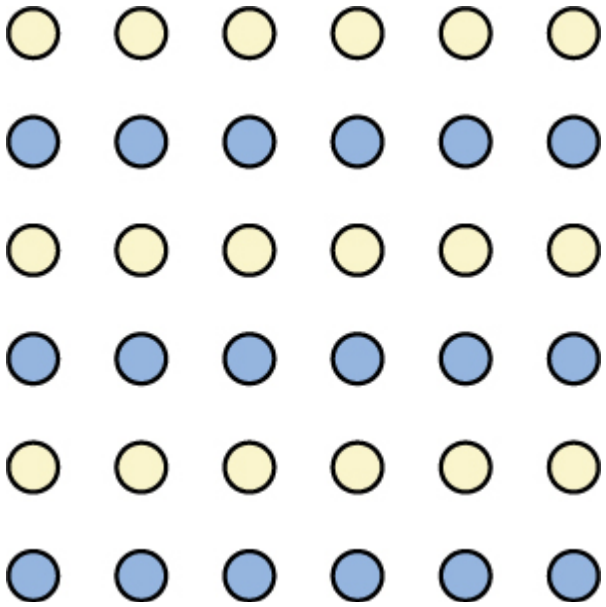
2. **Proximity**: This principle asserts that ***things that are close to one another tend to be grouped together***.



The Gestalt principle of proximity suggests that you see (a) one block of dots on the left side and (b) three columns on the right side.

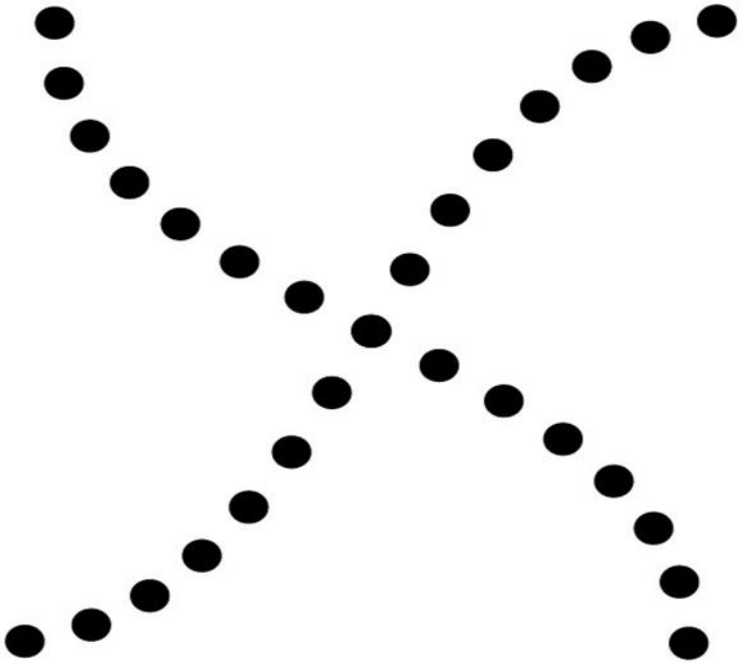
For example, we read this sentence like this, ***notl iket hiso rt hat***. We group the letters of a given word together because there are no spaces between the letters, and we perceive words because there are spaces between each word. Here are some more examples: ***Cany oum akes enseo ft hiss entence? What doth es e wor dsmea n?***

3. **Similarity:** This principle asserts ***things that are alike tend to be grouped together***



When looking at this array of dots, we likely perceive alternating rows of colors. We are grouping these dots according to the principle of similarity.

4. **Continuity:** The law of continuity suggests that we are more likely to perceive continuous, smooth flowing lines rather than jagged, broken lines.



Good continuation would suggest that we are more likely to perceive this as two overlapping lines, rather than four lines meeting in the center

5. The **principle of closure** states that we organize our perceptions into complete objects rather than as a series of parts.

Closure suggests that we will perceive a complete circle and rectangle rather than a series of segments.

You probably feel fairly certain that ***your perception accurately matches the real world, but this is not*** always the case. Our perceptions are based on ***perceptual hypotheses:*** educated guesses that we make while interpreting sensory information.

These hypotheses are informed by a ***number of factors***, including our ***personalities, experiences,*** and ***expectations.***

Chapter Three
LEARNING
Learning Objectives
By the end of this section, you will be able to:

- Define learning
- Differentiate the performance that due to maturation and learning
- Recognize and define three basic forms of learning—classical conditioning, operant conditioning, and observational learning.
- Explain how classical conditioning occurs
- Summarize the processes of acquisition, extinction, spontaneous recovery, generalization, and discrimination
- Define operant conditioning
- Explain the difference between reinforcement and punishment
- Distinguish between reinforcement schedules
- Define observational learning
- Discuss the steps in the modeling process
- Explain the prosocial and antisocial effects of observational learning

3.1. WHAT IS LEARNING?

One of the most important, universal and distinctive characteristics of human beings is their capacity to learn. Our habits, skills, knowledge, attitudes, interests and characteristics are largely the result of learning. The capacity to learn, progresses throughout the life span until death. It is through the process of learning that human behavior changes or undergoes modification. The knowledge, understanding and skills obtained from the process of learning help mankind have to control and change their environment for their own benefit.
Definition- ***Learning*** is a relatively permanent change in behavior as a result of practice and experience.
The above definition contains the following components

- One has to distinguish between performance due to maturation and changes brought about by experience;
- One has to distinguish between short-term changes in behavior due to fatigue,; tension, stimulants and changes that are due to actual learning.
- The changes in behavior could be for worse or better;

Some Psychologists claim that learning can only be ***inferred indirectly*** by observing changes in performance. Others argue that ***learning and performance*** are the same. According to them, the emphasis is should be on observable performance than the mental component of learning.

3.2. BEHAVIORIST LEARNING THEORIES

- Behaviorists view learning as the product of the ***association between stimulus conditions*** (S) and the responses (R).
- It is sometimes referred as the ***S-R model of learning***.
- The behaviorist closely observes responses and then manipulates the environment to bring about the intended change.
- The two basic models of learning in behaviorism are ***classical conditioning model*** and ***operant (instrumental) conditioning models***.

3.2.1. CLASSICAL CONDITIONING

The theory of classical conditioning aims to account for the way in which reflex behavior may become associated with a new stimulus that does not naturally activate that behavior. It emphasizes the importance of stimulus conditions and the associations formed in the learning process.

Classical Conditioning Terminology

- **Classical conditioning**: The type of learning that occurs when a stimulus ***(the unconditioned stimulus)*** that naturally produces a response (***the unconditioned response***) is paired with a stimulus (the conditioned stimulus) that doesn't naturally produce the response (the conditioned response). Typically after many pairings, the conditioned stimulus begins to produce the conditioned response.
- ***A neutral stimulus (NS),*** a stimulus that has no particular value or meaning to the learner.
- ***Unconditioned stimulus (UCS):*** The stimulus that naturally produces the unconditioned response.
- ***Unconditioned response (UCR):*** The response that is naturally produced by the unconditioned stimulus.
- ***Conditioned stimulus (CS):*** The stimulus that produces the conditioned response only after learning.
- ***Conditioned response (CR):*** The response that is produced by the conditioned stimulus only after learning.

Pavlov (1927), the Russian physiologist, was studying the salivary reflex in dogs. When he observed that the dogs salivated not only at the sight and smell of food, a natural response, but also at the sight of the food container alone.

- According to this model of learning, a neutral stimulus (NS), a stimulus that has no particular value or meaning to the learner is paired with a naturally occurring unconditioned or unlearned stimulus (UCS) and unconditioned response (UCR).
- After a few such pairings, the neutral stimulus alone, elicits the same response.
- Through a series of experiments, he demonstrated that dogs could be conditioned to salivate to other unnatural stimuli such as a buzzer being sounded slightly before the presentation of food. Such a pairing caused an association to be formed between the buzzer and the food subsequently between the buzzer and the salivation response.

The process of classical conditioning model of learning.

UCS---------- UCR (before conditioning)
(Food) (Salivation)
NS+UCS---------- UCR (during conditioning)
(Buzzer + Food) (Salivation)
(Several pairings)
NS---------- UCR
CS---------- CR (after conditioning)
(Buzzer) (Salivation).

General Processes in Classical Conditioning

1. **Acquisition**

Acquisition is the ***initial period of learning*** is known as **acquisition**, when an organism learns to connect a neutral stimulus and an unconditioned stimulus.

- During acquisition, the neutral stimulus begins to elicit the conditioned response, and eventually the neutral stimulus becomes a conditioned stimulus capable of eliciting the conditioned response by itself.
- ***Timing*** is important for conditioning to occur. Typically, there should only be a brief interval between presentation of the conditioned stimulus and the unconditioned stimulus(***this interval is as little as five seconds***).
- ***Frequency*** is also important for conditioning to occur. Several times should be presented CS with UCS.

2. **Extinction**

Extinction is the disappearance of a response when the ***UCS*** no longer accompanies the ***CS***. Pavlov found that when a CS was repeatedly presented in the absence of food, the CR of salivation became weaker and eventually stopped.

Example: Visitors who feel discomfort in one hospital subsequently go to other hospitals to see relatives or friends without smelling offensive odors, and then their discomfort and anxiety about hospitals may be lessened after several such pairings.

3. **Spontaneous recovery**

Spontaneous recovery is the reappearance of an extinct response after some time has passed.

Example: It is so difficult to give up unhealthy habits, and addictive behaviors such as smoking, alcoholism or drug abuse. A cured addict of khat or alcohol may suddenly relapse to chewing or consuming if he/she is continuously exposed to khat or alcohol.

4. **Stimulus Generalization**

Stimulus Generalization is the tendency of initial learning experience to be easily applied to other similar stimuli.

For ***example***, it is not uncommon for patients to report ***anticipatory nausea and vomiting (ANV)*** when they see the ***oncology nurse*** who administers their drugs or when they attend the same hospital for another matter.

5. **Stimulus Discrimination**

Stimulus discrimination is the tendency, after a CS-UCS association has been learned, for other CSs to not produce the response if they are sufficiently different from the original CS.

- The opposite process to generalization is discrimination.
- With more varied experiences individuals learn to differentiate among similar stimuli.

For ***example***, if two different tones were sounded but food was presented with only one of them, the dog would learn to salivate discriminately.

6. **Systematic Desensitization**

Systematic desensitization is type of behavioral therapy in which individuals are gradually presented with stimuli that more and more closely resemble their fear, in an attempt to reduce the anxiety provoked by this stimulus.

- Fear can be learned and unlearned or extinguished.

For example, patients with ANV is treated for the following procedures.

- ***First***, patients are taught ***progressive muscle relaxation techniques***.
- ***Next,*** the patient and the therapist construct what is known as an '***anxiety hierarchy'***, a list of feared situations relating to the chemotherapy treatment (e.g. driving to the hospital or seeing the oncology nurse). This hierarchy of anxiety-provoking situations is ordered from the least to the most unpleasant. As the patient reaches a state of deep relaxation they are asked to imagine or are confronted by the least threatening situation in the hierarchy.
- The patient repeatedly imagines or is confronted by this situation until it fails to elicit anxiety, indicating that the counter-conditioning has been successful.
- This process is repeated while working through all of the situations in the hierarchy.

3.2.2. OPERANT CONDITIONING

Definition-It describes learning as strengthening or weakening voluntary response, depending on its positive or negative consequences.

Example: Working industriously can bring about a raise in salary or bonus.

In ***operant conditioning,*** organisms learn to associate a behavior and its consequence.

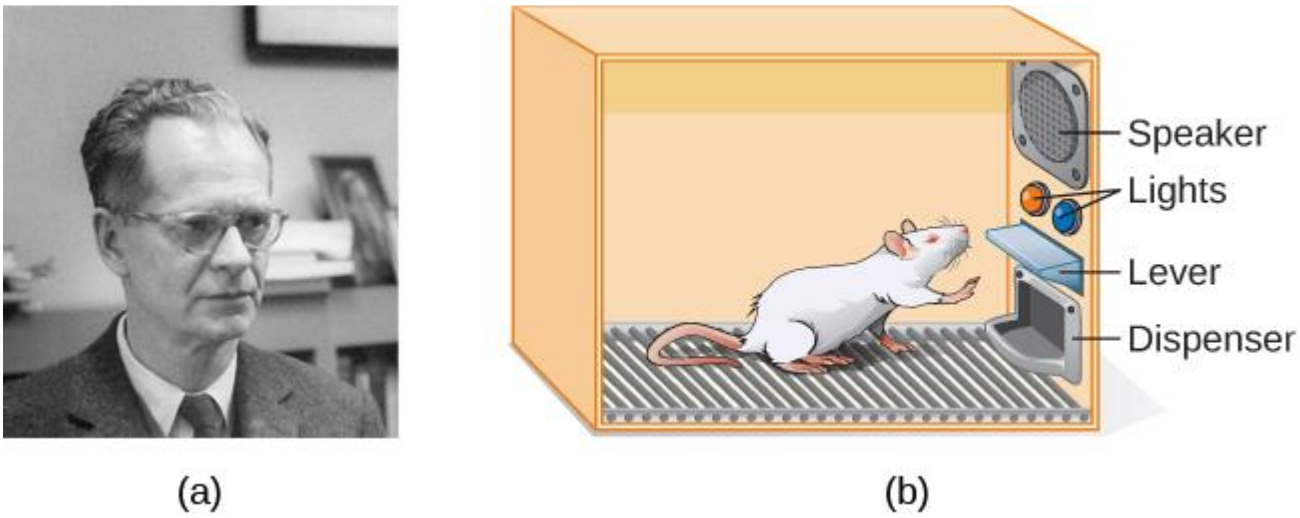
Law of effect: States that behaviors that lead to unpleasant consequences are less likely to be repeated, but behaviors that lead to pleasant consequences are more likely to be repeated.

The model focuses on the behavior of the organism and the reinforcement that occurs after the response. ***B.F. Skinner*** has largely developed and popularized the model.

Working with ***Thorndike's law of effect*** as his foundation, Skinner began conducting scientific experiments on animals (mainly rats and pigeons) to determine how organisms learn through operant conditioning. He placed these animals inside an ***operant conditioning chamber,*** which has come to be known as a "***Skinner box".***

Basic Steps followed by Skinner in Operant Conditioning

1. A hungry animal (a cat, a rat, a pigeon) is placed in a laboratory setting (example-Skinner box)
2. The animal will wander in the box, exploring its environment in a random way.
3. The animal will press a lever by chance, which enables it to receive food from the food container.
4. The first time the response occurred, the animal will not learn the connection between lever pressing and the stimulus (food).
5. As the frequency of lever pressing increases, the animal learns that the receipt of food is dependent on lever pressing behavior.



(a) B. F. Skinner developed operant conditioning for systematic study of how behaviors are strengthened or weakened according to their consequences. (b) In a Skinner box, a rat presses a lever in an operant conditioning chamber to receive a food reward.

In discussing operant conditioning, we use several everyday words; positive, negative, ***reinforcement,*** and ***punishment*** in a specialized manner. In operant conditioning, positive and negative do not mean good and bad. Instead, ***positive*** means you are adding something, and ***negative*** means you are taking something away. ***Reinforcement*** means you are increasing a behavior, and ***punishment*** means you are decreasing a behavior. Reinforcement can be positive or negative, and punishment can also be positive or negative. All reinforcers (positive or negative) ***increase*** the likelihood of a behavioral response. All punishers (positive or negative) ***decrease*** the likelihood of a behavioral response. Now let's combine these four terms: positive reinforcement, negative reinforcement, positive punishment, and negative punishment.

Positive and Negative Reinforcement and Punishment		
	Reinforcement	***Punishment***
Positive	Something is ***added*** **to** ***increase*** the likelihood of a behavior.	Something is ***added*** **to** ***decrease*** the likelihood of a behavior.
Negative	Something is ***removed*** **to** ***increase*** the likelihood of a behavior.	Something is ***removed to decrease*** the likelihood of a behavior.

General Processes in Operant Conditioning

1. **Reinforcement**

The most effective way to teach a person or animal a new behavior is with positive reinforcement. In ***positive reinforcement,*** a desirable stimulus is added to increase a behavior.

For ***example***, you tell your five-year-old son, Omer, that if he cleans his room, he will get a toy. Omer quickly cleans his room because he wants a new toy.

- Being praised for doing a good job is also a reward.
- Positive reinforcement as a learning tool is extremely effective.

In ***negative reinforcement***, an undesirable stimulus is removed to increase a behavior. For ***example,*** car manufacturers use the principles of negative reinforcement in their seatbelt systems, which go "beep, beep, beep" until you fasten your seatbelt.

2. Punishment

In ***positive punishment,*** you ***add an undesirable stimulus*** to decrease a behavior. An ***example*** of positive punishment is scolding a student to get the student to stop texting in class.

In ***negative punishment,*** you remove a pleasant stimulus to decrease a behavior. For ***example***, rats might typically receive food regularly, but food might be withheld when they are climbing on the walls of the cage; alternatively, children might typically be able to play with certain toys, but the toys might be withheld when the children are fighting.

- Punishment, especially when it is immediate, is one way to decrease undesirable behavior.
- Physical punishment on children may teach fear. Children who are punished by teachers may come to fear the teacher and try to avoid school.
- Punishment may cause children to become more aggressive and prone to antisocial behavior and delinquency.

While positive punishment can be effective in some cases, Skinner suggested that the use of punishment should be weighed against the possible negative effects. Today's psychologists and parenting experts favor reinforcement over punishment—they recommend that you catch your child doing something good and reward her for it.

3. Shaping

Shaping means to reward successive approximations of a target behavior. Shaping is needed because it is extremely unlikely that an organism will display anything but the simplest of behaviors spontaneously. In shaping, behaviors are broken down into many small, achievable steps. The specific steps used in the process are the following:

- Reinforce any response that ***resembles*** the desired behavior.
- Then reinforce the response that ***more closely resembles*** the desired behavior. You will no longer reinforce the previously reinforced response.
- Continue to ***reinforce closer and closer approximations*** of the desired behavior.
- ***Finally,*** only reinforce the ***desired behavior.***

Shaping is often ***used in teaching a complex behavior*** or ***chain of behaviors***.

4. Primary and Secondary Reinforcers

- ***Primary reinforcers*** are reinforcers that have ***innate reinforcing qualities***. These kinds of reinforcers are not learned. Water, food, sleep, shelter, sex, and touch, among others, are primary reinforcers. Pleasure is also a primary reinforcer.
- ***A secondary reinforcer*** has ***no inherent value*** and only has reinforcing qualities when linked with a primary reinforcer. ***Praise,*** linked to affection, is one ***example*** of a secondary reinforce. Another ***example***, ***money,*** is only worth something when you can use it to buy other things.

5. Reinforcement Schedules

There are ***two types*** of reinforcement schedules

Continues Reinforcement

- When an organism receives a reinforce each time it displays a behavior, it is called ***continuous reinforcement***.
- The continuous reinforcement schedule is the ***quickest way*** to teach someone a behavior, and it is especially effective in ***training a new behavior***.
- ***Timing is important here***: you will be most successful if you present the reinforcer immediately after he performs desired behavior, so that he can make an ***association*** between the target behavior and the consequence.

Partial Reinforcement

- In ***partial reinforcement,*** the person or animal does not get reinforced every time they perform the desired behavior.
- There are four types of partial reinforcement schedules.

1. A ***fixed interval reinforcement schedule:*** Reinforcement is delivered at predictable time intervals (e.g., after 5, 10, 15, and 20 minutes).
2. A ***variable interval reinforcement schedule:*** Reinforcement is delivered at unpredictable time intervals (e.g., after 5, 7, 10, and 20 minutes). You have experienced a ***VI schedule*** if you've taken a course with a professor who gave occasional, irregularly scheduled pop quizzes. Did you study your notes each day before class?
3. A ***fixed ratio reinforcement schedule****:* Reinforcement is delivered after a predictable number of responses (e.g., after 2, 4, 6, and 8 responses).
4. A ***variable ratio reinforcement schedule***: Reinforcement is delivered after an unpredictable number of responses (e.g., after 1, 4, 5, and 9 responses).

3.3. OBSERVATIONAL LEARNING (MODELING)

In ***observational learning***, we learn by watching others and then imitating, or modeling, what they do or say. The individuals performing the imitated behavior are called ***models***. Albert Bandura and other researchers proposed a brand of behaviorism social learning theory, which took ***cognitive processes*** into account. According to Bandura, pure behaviorism could not explain why learning can take place in the absence of external reinforcement. He felt that ***internal mental*** states must also have a role in learning and that observational learning involves much more than imitation. According to Lefrancois (2012) there are ***several ways*** that observational learning can occur:

1. You learn a new response.
2. You choose whether or not to imitate the model depending on what you saw happen to the model.
3. You learn a general rule that you can apply to other situations.

Bandura identified ***three kinds of models***: live, verbal, and symbolic.

- ***A live model*** demonstrates a behavior in person.
- ***A verbal instructional model*** does not perform the behavior, but instead explains or describes the behavior.
- ***A symbolic model*** can be fictional characters or real people who demonstrate behaviors in books, movies, television shows, video games, or Internet sources.

Steps in The Modeling Process

Of course, we don't learn a behavior simply by observing a model. Bandura described specific steps in the process of modeling that must be followed if learning is to be successful: attention, retention, reproduction, and motivation.

- ***Attention:*** You must be focused on what the model is doing.
- ***Retention:*** You must be able to retain, or remember, what you observed.
- ***Reproduction:*** You must be able to perform the behavior that you observed.
- ***Motivation:*** You must have motivation.

You need to want to copy the behavior, and whether or not you are motivated depends on what happened to the model. If you saw that the model was reinforced for her behavior, you will be more motivated to copy her. This is known as ***vicarious reinforcement.*** On the other hand, if you observed the model being punished, you would be less motivated to copy her. This is called ***vicarious punishment.***

Bandura concluded that we watch and learn, and that this learning can have both prosocial and antisocial effects.

- ***Prosocial (positive) models*** can be used to encourage ***socially acceptable behavior.*** If you want your children to read, then read to them.
- ***The antisocial effects*** of observational learning are also worth mentioning. Research suggests that this may help to explain why abused children often grow up to be abusers themselves (Murrell, Christoff, & Henning, 2007).

Some studies have found a link between viewing violence and aggression seen in children (Graham-Bermann, 2012).

Chapter Four
MOTIVATION AND EMOTION
Learning Objectives
By the end of this section, you will be able to:

- Define motivation
- Understand that instincts, drive reduction, incentives, and cognitive motives have all been proposed as theories of motivation
- Explain the basic concepts associated with Maslow's hierarchy of needs
- Define emotion
- Explain the major theories of emotion

4.1. MOTIVATION

Motivation: It is the factor that directs and energizes the behavior of humans and other organisms.
Motive is a need or desire that prompts us to do something.
The study of motivation answers the following questions.

1. Why do people behave as they do?
2. Why does behavior take one form and not another?
3. What makes people behave differently or similarly?
4. How can we motivate people to behave in particular ways, such as eating certain foods or quitting smoking?

4.1.1. THEORIES OF MOTIVATION

There are different conceptual approaches to the study of motivation. They differ in their focus on biological factors**, c**ognitive factors **and** social factors

1. The Instinct Approaches to Motivation

This theory states that motivation is the result of an inborn, biologically determined pattern of behavior. According to this approach, people and animals are born with programmed sets of behavior essential to their survival. For ***example***, in humans, instincts may include behaviors such as an infant's rooting for a nipple and sucking.

2. Drive Reduction Approach to Motivation (DRT)

Theory of motivation proposed that the maintenance of homeostasis is particularly important in directing behavior. This theory suggests that when people lack some basic biological requirements such as water and food, a drive to obtain these requirements is produced.
According to ***DRT,*** being hungry is uncomfortable because I'm out of homeostasis. To reduce this tension and restore balance, I look for something to eat.

- A drive is tension, arousal that pushes behavior in order to fulfill some need.

Example: hunger, thirst, sleepiness, and sex.

3. Incentive Approaches to Motivation

This approach attempts to explain motivation in terms of the nature of the external stimuli; incentives that direct and energize behavior. According to this view, properties of external stimuli are major causes for a person's motivation.
Example: after eating our meal, we choose to eat a sweet cake. Such behavior is motivated by the dessert itself but not to satisfy internal drives.

4. Cognitive Approaches to Motivation

This approach focuses on the role of our thought, expectations, and understanding of the world.

In line with this approach, there are ***two forms*** of motivations.

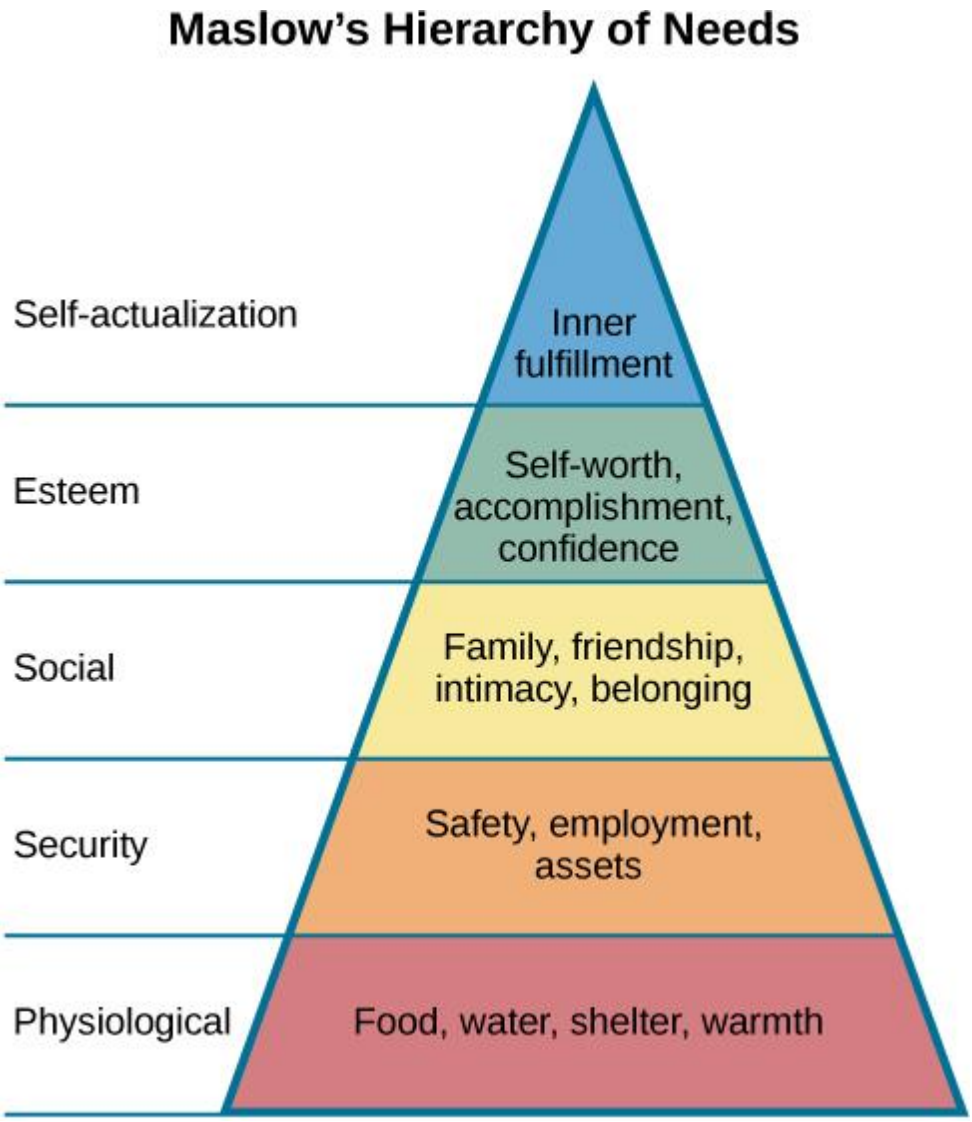
- ***Intrinsic Motivation:*** It is motivation by which people participate in an activity for their own enjoyment, not for the reward it will bring. For ***example***, you enables to work hard, produce higher quality work and be perseverant.
- ***Extrinsic Motivation:*** It causes us to do something for a ***tangible reward***. For ***example***, if you are here because you want to get a college degree to make yourself more marketable for a high-paying career or to satisfy the demands of your parents.

5. Maslow's Motivational Theory

Maslow's theory that people desire to fulfill physiological needs first, then safety needs, then social needs, then esteem needs. Once all other needs are met, people desire to reach their full potential(self-actualization).

Basic Assumptions of the Theory

- Different motivational needs are arranged in a hierarchy in a pyramidal shape.
- The more basic needs are at the bottom and the higher level needs are at the top.
- Before higher ordered needs are satisfied in the hierarchy, the primary needs must be satisfied.
- ***Physiological needs*** are based on body needs (e.g., food, water,)
- ***Security need*** is a need for sense of confidence, safety, and freedom from fear or anxiety, particularly with respect to fulfilling ones present and future needs.
- ***Love and belongingness needs*** include the need to obtain and give affection and contributing to members of some group or society.
- ***Esteem need*** relates to the development of a sense of worth by knowing that others are aware of one's competence and value.
- ***Self- actualization*** is a state of self- fulfillment in which people realize their highest potential.



6. Achievement motivation theory

It is a ***stable***, learned characteristic in which satisfaction is obtained by striving for and attaining a level of excellence.

- People with ***high achievement motivation*** tend to compete against ***some standards*** and prove themselves ***successful.*** They tend to choose tasks that are of ***intermediate difficulty.***
- People with ***low achievement motivation*** tend to be motivated primarily by a desire to ***avoid failure***. As a result they ***choose easy tasks.***
- The outcome of high achievement motivation is generally positive. Research shows that high achievement motivation is associated with future economic and occupational success.

4.2. EMOTIONS

An emotion is a subjective state of being that we often describe as our feelings such as happiness, despair, and sorrow that generally have both physiological and cognitive elements influencing behavior.

Example:

Physiological

- Heart rate increases
- Jumping for joy

Cognitive

- Understanding and evaluating of the meaning of the act we do when we are happy

4.2.1. THEORIES OF EMOTION

1. The James-Lange theory

The James-Lange theory of emotion asserts that emotions arise from ***physiological arousal.*** Theory states that emotional experience is a reaction to ***instinctive bodily events*** that occur as a response to some situation or event in the environment. We feel sorry because we cry. We feel angry because we strike. We feel afraid because we tremble.

Event-----Physiological changes---Emotion

James and Lang proposed that human beings experience emotions as a result of Physiological changes that produce ***specific sensations***. The brain interprets the sensations as ***particular kinds*** of emotional experiences.

2. The Cannon-Bard Theory

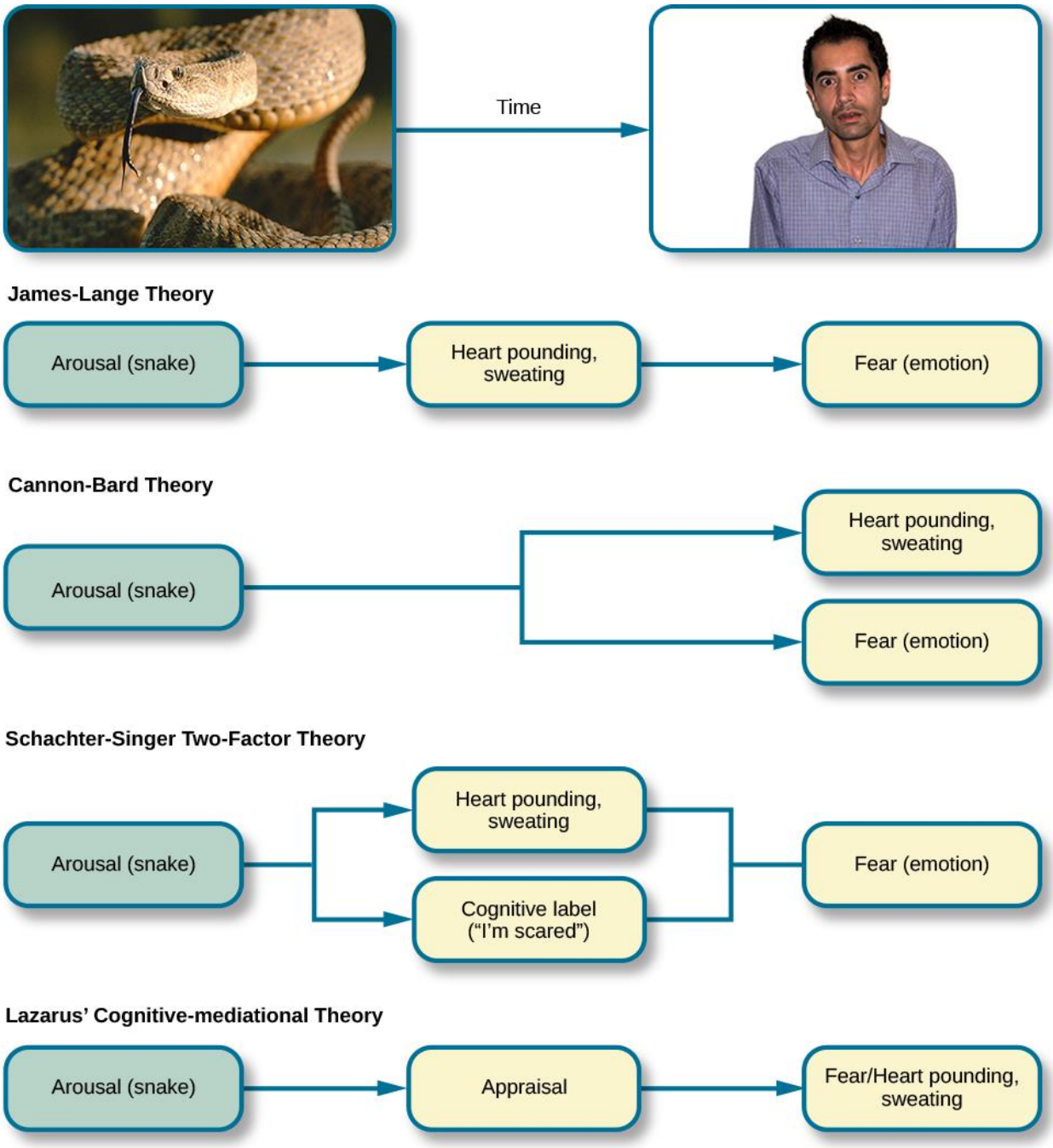
Walter Cannon (1932) and Phillip Bard disagreed with the James-Lange theory. According to the Cannon-Bard theory, ***emotional feelings and bodily arousal occur at the same time.*** Thus, if you see a dangerous snake, brain activity will simultaneously produce bodily arousal, running, and a feeling of fear.

3. The Schachter-Singer Two-Factor Theory

According to this theory, emotions are composed of two factors: ***physiological*** and ***cognitive***. In other words, physiological arousal is interpreted in context to produce the emotional experience. The two-factor theory maintains that the snake elicits sympathetic nervous system activation that is labeled as fear given the context, and our experience is that of fear.

4. Lazarus' Cognitive-Mediational Theory

Lazarus developed the cognitive-mediational theory that asserts our emotions are determined by our ***appraisal of the stimulus***. This appraisal ***mediates*** between the stimulus and the emotional response, and it is immediate and often unconscious.



This figure illustrates the major assertions of the James-Lange, Cannon-Bard, Schachter-Singer two-factor theories and Lazarus' cognitive-mediational theoryof emotion.

4.3. EXPRESSION OF EMOTION

Non- verbal behavior is a major means of communicating and revealing people's emotions. The Non- verbal behavior communicates using ***several channels*** or paths. These are:

- Facial expressions;
- Eye contact;
- Bodily movements;
- Tone voice;
- Positioning of the eyebrows.

From all these ways, facial expressions represent the primary means of communicating emotional states. Facial expression communicates the following ***six most distinctively*** identified ***basic emotions***.

- Happiness
- Anger
- Sadness
- Surprise
- Disgust
- Fear

Members of the human race regardless of the situation express these six emotions ***universally***. The facial-affect program hypothesis assumes ***that each primary emotion is universally present at birth.***

Chapter Five
LIFESPAN DEVELOPMENT
Learning Objectives
By the end of this section, you will be able to:

- Define Lifespan Development
- Define and distinguish between the three domains of development: physical, cognitive and psychosocial
- Understand the three major issues in development: continuity and discontinuity, one common course of development or many unique courses of development, and nature versus nurture
- Describe the major tasks of child and adult psychosocial development according to Erikson
- Discuss Piaget's view of cognitive development and apply the stages to understanding childhood cognition
- Describe the stages of prenatal development and recognize the importance of prenatal care
- Discuss physical, cognitive, and emotional development that occurs from infancy through childhood
- Discuss physical, cognitive, and emotional development that occurs during adolescence
- Discuss physical, cognitive, and emotional development that occurs in adulthood

5.1. WHAT IS THE LIFESPAN DEVELOPMENT

Developmental psychologists ***try to study how humans change and grow from conception through childhood, adolescence, adulthood, and death***. They view development as a lifelong process that can be studied scientifically across ***three developmental domains***—physical, cognitive, and psychosocial development.

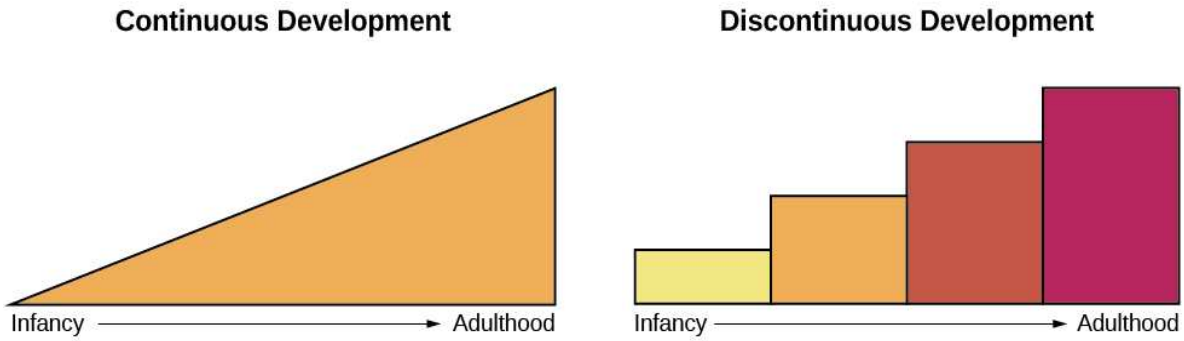
- ***Physical development*** involves growth and changes in the body and brain, the senses, motor skills, and health and wellness.
- ***Cognitive development*** involves learning, attention, memory, language, thinking, reasoning, and creativity. ***Psychosocial development*** involves emotions, personality, and social relationships.

5.1.1. ISSUES IN DEVELOPMENTAL PSYCHOLOGY

There are ***many different theoretical approaches*** regarding human development. Developmental psychology ***focuses on how people change, and keep in mind that all the approaches that we present in this chapter address questions of change:***

- Is the change smooth or uneven (***continuous versus discontinuous***)?
- Is this pattern of change the same for everyone, or are there many different patterns of change ***(one course of development versus many courses***)?
- How do genetics and environment interact to influence development (***nature versus nurture)?***

1. **Is Development Continuous or Discontinuous?**
   - ***Continuous development*** views development as a cumulative process, gradually improving on existing skills. With this type of development, there is gradual change. Consider, for ***example,*** a child's physical growth: adding inches to her height year by year.
   - ***Discontinuous development*** believe that development takes place in unique stages: It occurs at specific times or ages. With this type of development, the change is more sudden, such as an infant's ability to conceive object permanence.



The concept of continuous development can be visualized as a smooth slope of progression, whereas discontinuous development sees growth in more discrete stages.

2. **Is There One Course of Development or Many?**

Is development essentially ***the same, or universal, for all children*** (i.e., there is one course of development) or does development ***follow a different course for each child***, depending on the child's specific genetics and environment (i.e., there are many courses of development)?

- Do people across the world share more similarities or more differences in their development?
- How much do culture and genetics influence a child's behavior?

Stage theories hold that the sequence of development is universal. For ***example***, in cross-cultural studies of language development, children from around the world reach language milestones in a similar sequence (Gleitman & Newport, 1995). Infants in all cultures ***coo*** before they *babble*. They begin babbling at about the same age and utter their first word around 12 months old. Yet ***we live in diverse contexts that have a unique effect on each of us.*** For ***example,*** researchers once believed that motor development follows one course for all children regardless of culture. However, child care practices vary by culture, and different practices have been found to accelerate or inhibit achievement of developmental milestones such as sitting, crawling, and walking .

How Do Nature and Nurture Influence Development?

Are we who we are because of ***nature*** (biology and genetics), or are we who we are because of ***nurture*** (our environment and culture)?

This longstanding question is known in psychology as the ***nature versus nurture debate***. It seeks to understand how our personalities and traits are the product of our genetic makeup and biological factors, and how they are shaped by our environment, including our parents, peers, and culture. For ***instance:***

- Why do biological children sometimes act like their parents—is it because of genetics or because of early childhood environment and what the child has learned from the parents?
- What about children who are adopted—are they more like their biological families or more like their adoptive families?
- And how can siblings from the same family be so different?

We are all born with specific genetic traits inherited from our parents, such as eye color, height, and certain personality traits. Our unique experiences in our environment influence whether and how particular traits are expressed, and at the same time, our genes influence how we interact with our environment.

5.2. LIFESPAN THEORIES

I. Psychosocial Theory of Development

Erik Erikson's ***psychosocial development*** theory emphasizes the social nature of our development. Erikson proposed that ***personality development takes place all through the lifespan.***

According to psychosocial theory, we experience ***eight stages*** of development over our lifespan, from infancy through late adulthood. At each stage there is a ***conflict,*** or task, that we need to resolve. Successful completion of each developmental task results in a ***sense of competence*** and a healthy personality. Failure to master these tasks leads to feelings of ***inadequacy.***

Stages of Development

1. ***Trust versus Mistrust Stages(0-18months)***: Infants are dependent upon their caregivers, so caregivers who are responsive and searching to their infant's needs help their baby to develop a sense of ***trust***; their baby will see the world as a safe, predictable place. Unresponsive caregivers who do not meet their baby's needs can engender feelings of anxiety, fear, and mistrust; their baby may see the world as unpredictable.
2. ***Autonomy versus Shame and Doubt Stage(18months-3years):*** by working to establish independence. This is the "***me do it"*** stage. For ***example,*** if denied the opportunity to act on her environment, she may begin to doubt her abilities, which could lead to low self-esteem and feelings of shame.
3. ***Initiative versus Guilt Stage(3–6 years):*** They are capable of initiating activities and asserting control over their world through social interactions and play. By learning to plan and achieve goals while interacting with others, preschool children can master this task. Those who do will develop ***self-confidence*** and ***feel a sense of purpose***. Those who are unsuccessful at this stage, with their initiative failing may develop ***feelings of guilt***.
4. ***Industry versus Inferiority Stage (6–12 years):*** Children begin to compare themselves to their peers to see how they measure up. They either develop a sense of pride and accomplishment in their schoolwork, sports, social activities, and family life, or they feel inferior and inadequate when they don't measure up. What are some things parents and teachers can do to help children develop a sense of competence and a belief in themselves and their abilities?

5. ***Identity versus Role Confusion Stage(ages 12–20):*** According to Erikson, an ***adolescent's*** main task is developing a ***sense of self.*** Adolescents struggle with questions such as "***Who am I?"*** and "***What do I want to do with my life?"*** Adolescents who are successful at this stage have a strong sense of identity and are able to remain true to their beliefs and values in the face of problems and other people's perspectives. What happens to apathetic adolescents, who do not make a conscious search for identity, or those who are pressured to conform to their parents' ideas for the future? These teens will have a weak sense of self and experience role confusion. They are unsure of their identity and confused about the future.
6. ***Intimacy versus Isolation Stage(20- 40 years*)**: People in ***early adulthood*** are concerned with intimacy versus isolation. After we have developed a sense of self in adolescence, we are ready ***to share our life with others.*** Erikson said that we must have a strong sense of self before developing intimate relationships with others. Adults who do not develop a positive self-concept in adolescence may experience feelings of loneliness and emotional isolation.
7. ***Generativity versus Stagnation Stage (40-60 years):*** The social task of ***middle adulthood*** is generativity versus stagnation. ***Generativity*** involves finding your life's work and contributing to the development of others, through activities such as volunteering, mentoring, and raising children. Those who do not master this task may experience stagnation, having little connection with others and little interest in productivity and self-improvement.
8. ***Integrity versus Despair Stage(60 years and older):*** Erikson's task at this stage is called integrity versus despair. He said that people in ***late adulthood*** reflect on their lives and feel either a sense of satisfaction or a sense of failure. People who feel proud of their accomplishments feel a sense of integrity, and they can look back on their lives with few regrets. However, people who are not successful at this stage may feel as if their life has been wasted. They focus on what "would have," "should have," and "could have" been. They face the end of their lives with feelings of bitterness, depression, and despair.

II. Cognitive Theory of Development

Piaget focused on children's cognitive growth. His theory of cognitive development holds that our cognitive abilities develop through ***specific stages.***

Piaget said that children develop ***schemata*** to help them understand the world. ***Schemata*** are concepts (mental models) that are used to help us categorize and interpret information.

- ***First,*** they assimilate new information or experiences in terms of their current schemata: ***assimilation*** is when they take in information that is comparable to what they already know.
- ***Accommodation*** describes when they change their schemata based on new information. This process continues as children interact with their environment.

He proposed a theory of cognitive development that explains in ***four stages***: sensorimotor, preoperational, concrete operational, and formal operational.

1. **Sensorimotor Stage(0-2years)**

During this stage, children learn about the world through ***their senses*** and ***motor behavior***. Young children put objects in their mouths to see if the items are edible, and once they can grasp objects, they may shake or bang them to see if they make sounds.

- Between 5 and 8 months old, the child develops ***object permanence,*** which is the understanding that even if something is out of sight, it still exists..
- In Piaget's view, around the ***same time*** children develop object permanence, they also begin to exhibit ***stranger anxiety***, which is a fear of unfamiliar people..
- ***Stranger anxiety*** results when a child is unable to assimilate the stranger into an existing schema; therefore, she can't predict what her experience with that stranger will be like, which results in a fear response.

2. **Preoperational Stage (2 to 7 years old)**

In this stage, children can use ***symbols to represent words, images, and ideas***, which is why children in this stage engage in ***pretend play.*** Children also begin ***to use language*** in the preoperational stage, but they ***cannot understand adult logic***.

- Children's logic is based on their ***own personal knowledge*** of the world so far, rather than on conventional knowledge.
- Children in this stage cannot perform mental operations because they have not developed an understanding of ***conservation***, which is the idea that even if you change the appearance of something, it is still equal in size as long as nothing has been removed or added.
- During this stage, we also expect children to display ***egocentrism***, which means that the ***child is not able to take the perspective of others***. For ***example***, 3 year olds play the hide and seek game. They hide their face against a wall covering their eyes, although they are still in plain view. It seems to them that if they cannot see, no one else will be able to see them.

3. **Concrete Operational Stage (7 to 12 years old)**

In this stage, children can ***think logically about real (concrete) events.***

- They can perform ***mathematical operations*** and understand ***transformations,*** such as addition is the opposite of subtraction, and multiplication is the opposite of division.
- In this stage, children also master the concept of ***conservation:*** Even if something changes shape, its mass, volume, and number stay the same. For ***example***, if you pour water from a tall, thin glass to a short, fat glass, you still have the same amount of water.
- Children in the concrete operational stage also understand the principle of ***reversibility***, which means that objects can be changed and then returned back to their original form or condition. For ***example***, reversing a ball of clay into a sausage shape and back to a ball shape.

4. **Formal Operational Stage (adolescence)**

The fourth, and last, stage in Piaget's theory is the ***formal operational stage***, which is from about age 12 to adulthood.

- Children in the formal operational stage can also deal with ***abstract ideas*** and ***hypothetical situations.***

- Children in this stage can use abstract thinking to ***problem solve***, look at ***alternative solutions***, and ***test these solutions***. In adolescence, a renewed egocentrism occurs.

4.3. STAGES OF DEVELOPMENT

Developmental psychologists often divide our development into ***three areas***: physical development, cognitive development, and psychosocial development. We will discuss prenatal, infant, child, adolescent, and adult development.

4.3.1. PRENATAL DEVELOPMENT

There are ***three stages*** of prenatal development: ***germinal, embryonic,*** and ***fetal***. Let's take a look at what happens to the developing baby in each of these stages.

1. **Germinal Stage (Weeks 1–2)**

Conception occurs when sperm fertilizes an egg and forms a ***zygote***.

- A ***zygote*** begins as a one-cell structure that is created when a sperm and egg merge. The ***genetic makeup*** and ***sex*** of the baby are set at this point.
- During the first week after conception, the zygote divides and ***multiplies***, going from a one-cell structure to ***two cells,*** then ***four cells,*** then ***eight cells,*** and so on. As the cells divide, they become more specialized, forming different organs and body parts. In the germinal stage, the ***mass of cells has yet to attach itself to the lining of the mother's uterus*** (***implantation***). Once it does, the next stage begins.

2. **Embryonic Stage (Weeks 3–8)**

Upon ***implantation,*** this multi-cellular organism is called an ***embryo***.

- The ***placenta*** is a structure connected to the uterus that provides nourishment and oxygen from the mother to the developing embryo via the ***umbilical cord***.
- ***Basic structures*** of the embryo start to develop into areas that will become the head, chest, and abdomen.

3. **Fetal Stage (Weeks 9–40)**

When the organism is about nine weeks old, the embryo is called a ***fetus***.

- ***From 9–12 weeks***, the sex organs begin to differentiate.
- At about ***16 weeks,*** the fetus is approximately ***4.5 inches long***. Fingers and toes are fully developed, and fingerprints are visible.
- By the time the fetus reaches the ***sixth month*** of development (24 weeks), it weighs up to ***1.4 pounds. Hearing has developed,*** so the fetus can respond to sounds. The internal organs, such as the lungs, heart, stomach, and intestines, have formed enough that a fetus born prematurely at this point has a chance to survive outside of the mother's womb.
- Throughout the fetal stage the ***brain continues to grow*** and develop, nearly ***doubling*** in size from ***weeks 16 to 28.***
- Around 36 weeks, the fetus is almost ready for birth. It weighs about ***6 pounds*** and is about ***18.5 inches*** long, and by week 37 all of the fetus's organ systems are developed enough that it could survive outside the mother's uterus without many of the risks associated with premature birth. The fetus continues to gain weight and grow in length until approximately 40 weeks.

Prenatal Influences

During each prenatal stage, ***genetic and environmental factors can affect development.***

- The developing fetus is completely dependent on the mother for life. It is important that the mother takes good care of herself and receives ***prenatal care,*** which is medical care during pregnancy that monitors the health of both the mother and the fetus.
- According to the National Institutes of Health ([NIH], 2013), ***routine*** prenatal care is important because it can reduce the risk of ***complications to the mother and fetus*** during pregnancy. women may be advised, for example, to take a vitamin containing folic acid, which helps prevent certain birth defects, or to monitor aspects of ***their diet*** or ***exercise routines.***
- Anything the mother is exposed to in the environment ***affects the fetus;*** if the mother is exposed to something harmful, the child can show life-long effects.

A teratogen is any environmental agent biological, chemical, or physical that causes damage to the developing embryo or fetus. There are ***different types*** of teratogens.

- Excessive maternal drinking while pregnant can cause ***fetal alcohol spectrum disorders*** with life-long consequences for the child ranging in severity from minor to major. Fetal alcohol spectrum disorders (FASD) are a collection of birth defects associated with heavy consumption of alcohol during pregnancy. Physically, children with FASD may have a ***small head size*** and *abnormal facial features.* Cognitively, these children may have ***poor judgment***, ***poor impulse control***, ***learning issues,*** and ***lower IQ scores.*** These developmental problems and delays persist into adulthood.
- ***Smoking*** is also considered a teratogen because nicotine travels ***through the placenta to the fetus***. When the mother smokes, the developing baby experiences ***a reduction in blood oxygen levels.*** According to the Centers for Disease Control and Prevention (2013), smoking while pregnant can result in ***premature birth, low-birth-weight infants, stillbirth,*** and ***sudden infant death syndrome (SIDS).***
- All prescription ***medicines*** are also considered teratogens.
- Other teratogens include ***radiation,*** viruses such as ***HIV***

4.3.2. INFANCY THROUGH CHILDHOOD

The average newborn weighs approximately ***7.5 pounds***. All healthy babies are born with ***newborn reflexes***: inborn automatic responses to particular forms of stimulation. ***Reflexes*** help the newborn survive until it is capable of more complex behaviors—these ***reflexes are crucial to survival***. They are present in babies whose brains are developing normally and usually ***disappear around 4–5 months old***. Let's take a look at some of these newborn reflexes.

- ***The rooting reflex*** is the newborn's response to anything that touches her cheek: When you stroke a baby's cheek, she naturally turns her head in that direction and begins to suck.
- ***The sucking reflex*** is the automatic, unlearned, sucking motions that infants do with their mouths.
- ***The grasping reflex***, in which a baby automatically grasps anything that touches his palms.
- ***The Moro reflex*** is the newborn's response when she feels like she is falling. The baby spreads her arms, pulls them back in, and then (usually) cries.

I. Physical Development

In infancy, toddlerhood, and early childhood, the body's physical development is rapid.

- On average, newborns weigh between 5 and 10 pounds, and a newborn's weight typically ***doubles*** in six months and ***triples*** in one year.
- ***By 2 years*** old should weigh ***between 20 and 40 pounds.***
- The average length of a newborn is ***19.5 inches***, increasing to ***29.5 inches*** by 12 months and ***34.4 inches*** by 2 years old.
- Growth ***slows*** between 4 and 6 years old: During this time children gain 5–7 pounds and grow about 2–3 inches per year.
- Once girls reach 8–9 years old, their growth rate ***outpaces*** that of boys due to a pubertal growth spurt. This ***growth spurt*** continues until around 12 years old, coinciding with the start of the menstrual cycle.
- We are born with all of the brain cells that we will ever have about 100–200 billion neurons (nerve cells) whose function is to store and transmit information. However, the nervous system continues to grow and develop.
- The size of our brains increases rapidly. For ***example***, the brain of a 2-year-old is ***55%*** of its adult size, and by 6 years old the brain is about ***90%*** of its adult size (Tanner, 1978).

Motor development occurs in an orderly sequence as infants move from reflexive reactions to more advanced motor functioning. For ***instance***, babies first learn to hold their heads up, then to sit with assistance, and then to sit unassisted, followed later by crawling and then walking.

Motor skills refer to our ability to move our bodies and manipulate objects.

- ***Fine motor skills*** focus on the muscles in our fingers, toes, and eyes, and enable coordination of small actions (e.g., grasping a toy, writing with a pencil, and using a spoon).
- ***Gross motor skills*** focus on large muscle groups that control our arms and legs and involve larger movements (e.g., balancing, running, and jumping).

As motor skills develop, there are certain ***developmental milestones*** that young children should achieve. For each ***milestone*** there is an average age, as well as a range of ages in which the milestone should be reached. An ***example*** of a developmental milestone is sitting. On average, most babies sit alone at ***7 months old***. In another ***example***, babies on average are able to ***hold up their head at 6 weeks old***, and ***90%*** of babies achieve this between 3 weeks and 4 months old. ***If a baby is not holding up his head by 4 months old, he is showing a delay.*** If the child is displaying delays on several milestones, that is reason for concern, and the parent or caregiver should discuss this with the child's pediatrician. ***Some developmental delays can be identified and addressed through early intervention.***

II. Cognitive Development

There are also ***cognitive milestones***. It is helpful to be aware of these milestones as children gain new abilities to think, problem solve, and communicate.

- For ***example***, infants shake their head "no" around 6–9 months, and they respond to verbal requests to do things like "wave bye-bye" or "blow a kiss" around 9–12 months.
- Piaget's ideas about object permanence? We can expect children to grasp the concept that objects continue to exist even when they are not in sight by around 8 months old. Because toddlers (i.e., 12–24 months old) have mastered object permanence, they enjoy games ***like hide and seek***, and they realize that when someone leaves the room they will come back (Loop, 2013).
- Toddlers also ***point to pictures*** in books and look in appropriate places when you ask them to find objects.

Preschool-age children (3–5 years old) also make steady progress in cognitive development.

- Preschool-age children understand ***basic time concepts*** and ***sequencing*** (e.g., before and after), and they can ***predict what will happen next*** in a story.
- They can think ***symbolically***, they enjoy pretend play and inventing ***elaborate characters*** and scenarios. One of the most common examples of their cognitive growth is their developing ***curiosity***. Preschool-age children love to ask ***"Why?"***
- Piaget described ***2–3 year olds*** as ***egocentri***c, meaning that they do not have an awareness of others' points of view.
- Between ***3 and 5 years old***, children come to understand that people have thoughts, feelings, and beliefs that are different from their own.

Cognitive skills continue to expand in ***middle and late childhood (6–11 years old).***

- Thought processes become more ***logical*** and organized when dealing with ***concrete information.***
- Children at this age understand concepts such as the ***past, present,*** and ***future***, giving them the ability to plan and work toward goals.
- They can process **complex ideas** such as ***addition*** and ***subtraction*** and ***cause-and-effect*** relationships.
- By ***3 years old*** they have a vocabulary of up to 1,***000 words and*** can speak in sentences.
- By *5 year olds* understand about ***6,000*** words, speak ***2,000*** words, and can define words and question their meanings.

III. Psychosocial Development

Psychosocial development occurs as children form relationships, interact with others, and understand and manage their feelings.

Attachment

Attachment is emotional bond between child and caregiver. Feelings of comfort and security are the critical components to maternal-infant bonding, which leads to healthy psychosocial development.

John Bowlby developed the concept of attachment theory.

- Bowlby proposed that this attachment bond is very ***powerful and continues throughout life.***
- He used the concept of ***secure*** base to define a healthy attachment between parent and child.

Types of Attachments

1. ***Secure attachment*** is the ***most common type*** of attachment, also considered the ***healthiest***. Securely attached children were distressed when their caregivers left the room in the Strange Situation experiment, but when their caregivers returned, the securely attached children were happy to see them. Securely attached children have ***caregivers who are sensitive and responsive to their needs.***
2. ***Avoidant attachment,*** the child is unresponsive to the parent, does not use the parent as a secure base, and does not care if the parent leaves. The toddler reacts to the parent the same way she reacts to a stranger. When the parent does return, the child is slow to show a positive reaction. These children were most likely to have a ***caregiver who was insensitive and inattentive to their needs.***
3. ***Resistant attachment***, children tend to show ***dependent behavior,*** but then they ***reject*** the attachment figure's attempts to interact with them. These children do not explore the toys in the room, as they are too fearful. During separation in the Strange Situation, they became extremely disturbed and angry with the parent. When the parent returns, the children are difficult to comfort. Resistant attachment is the result of the ***caregivers' inconsistent level of response to their child.***
4. ***Disorganized attachment*****,** children with disorganized attachment behaved oddly in the Strange Situation. They freeze, run around the room in an erratic manner, or try to run away when the caregiver returns. ***This type of attachment is seen most often in kids who have been abused.*** Research has shown that abuse disrupts a child's ability to regulate their emotions.

Self-Concept

The primary psychosocial milestone of childhood is the development of a ***positive sense of self.***

- Infants do not have a self-concept, which is an understanding of who they are. If you place a baby in front of a mirror, she will reach out to touch her image, thinking it is another baby. However, ***by about 18 months*** a toddler will recognize that the person in the mirror is herself.
- By ***24–36 months*** old children can name and/or point to themselves in pictures, clearly indicating ***self-recognition***.
- Children from ***2–4 years old*** display a great increase in ***social behavior*** once they have established a self-concept. They enjoy ***playing with other children***.
- Through play children explore and come to understand their ***gender roles*** and can label themselves as a girl or boy.
- By ***4 years old,*** children can cooperate with other children, share when asked, and separate from parents with little anxiety. Children at this age also exhibit autonomy, initiate tasks, and carry out plans. Success in these areas contributes to a positive sense of self.

- Once children reach 6 years old, they can identify themselves in terms of ***group memberships:*** "***I'm a first grader***!"
- ***School-age children*** compare themselves to their peers and discover that they are ***competent*** in some areas and ***less*** so in others (recall Erikson's task of industry versus inferiority). At this age, children recognize their own personality traits as well as some other traits they would like to have. For ***example***, 10-year-old Layla says, "I am kind of shy. I wish I could be more talkative like my friend Khadan."

Development of a positive self-concept is important to healthy development. Children with a positive self-concept tend to be more confident, do better in school, act more independently, and are more willing to try new activities.

Parenting Style

What can parents do to nurture a healthy self-concept? Diana Baumrind (1971) thinks parenting style may be a factor. The way we parent is an important factor in a ***child's socioemotional growth***. Baumrind developed and refined a theory describing four parenting styles: authoritative, authoritarian, permissive, and uninvolved.

1. **Authoritative style**: the parent gives ***reasonable demands*** and ***consistent limits***, expresses warmth and affection, and listens to the child's point of view. ***Parents set rules and explain the reasons behind them***. They are also ***flexible*** and willing to make exceptions to the rules in certain cases. Children raised by authoritative parents tend to have ***high self-esteem*** and ***social skills.***
2. **Authoritarian style**: The parent places ***high value on conformity and obedience***. The parents are often ***strict***, tightly monitor their children, and ***express little warmth***. This style can create ***anxious, withdrawn,*** and ***unhappy kids.***
3. **Permissive style:** For parents who employ the permissive style of parenting, ***the kids run the show and anything goes.*** Permissive parents make few demands and rarely use punishment. They tend to be very nurturing and loving, and may play the role of friend rather than parent. Children raised by permissive parents tend to ***lack self-discipline,*** and the permissive parenting style is ***negatively associated with grades***.
4. **Uninvolved style:** With the uninvolved style of parenting, the parents are ***indifferent***, ***uninvolved***, and sometimes referred to as ***neglectful***. They do not respond to the child's needs and make relatively few demands. This could be because of severe depression or substance abuse, or other factors such as the parents' extreme focus on work. These parents may provide for the child's basic needs, but little else. The children raised in this parenting style are usually ***emotionally withdrawn, fearful, anxious, perform poorly in school,*** and are at ***an increased risk of substance abuse.***

4.3.3. ADOLESCENCE

Adolescence is the period of development that begins at puberty and ends at emerging adulthood. This stage of development also has some predictable physical, cognitive, and psychosocial milestones.

I. Physical Development

Adolescence begins with puberty. While the sequence of physical changes in puberty is predictable, the onset and pace of puberty vary widely. Primary and secondary sexual characteristics develop and mature.

- ***Primary sexual characteristics*** are organs specifically needed for reproduction, like the uterus and ovaries in females and testes in males.
- ***Secondary sexual characteristics*** are physical signs of sexual maturation that do not directly involve sex organs, such as ***development of breasts*** and ***hips in girls***, and development of ***facial hair*** and ***a deepened voice in boys***.
- experience ***menarche***, the beginning of menstrual periods, usually around 12–13 years old, and boys experience ***spermarche***, the first ejaculation, around 13–14 years old.
- During puberty, both sexes experience a rapid increase in height (i.e., ***growth spurt***). Both ***nature*** (i.e., genes) and ***nurture*** (e.g., nutrition, medications, and medical conditions) can influence height.

Early maturing boys tend to be stronger, taller, and more athletic than their later maturing peers. They are usually ***more popular***, ***confident***, and ***independent***, but they are also at a ***greater risk*** for substance abuse and early sexual activity (Rantanen, 2001).

Early maturing girls may be teased or overtly admired, which can cause them to feel ***self-conscious*** about their developing bodies. These girls are at a ***higher risk*** for depression, substance abuse, and eating disorders (Cachelin, 1999).

Negative feelings are particularly a problem for ***late maturing boys,*** who are at a higher risk for depression and conflict with parents and more likely to be bullied (Pollack & Shuster, 2000).

II. Cognitive Development

More complex thinking abilities emerge during adolescence.

- Adolescence become capable of ***abstract thought***. Teen thinking is also characterized by the ability to consider multiple points of view, imagine ***hypothetical situations***, debate ideas and opinions (e.g., politics, religion, and justice), and form new ideas.

III. Psychosocial Development

Adolescents continue to refine their sense of self as they relate to others.

- Erikson referred to the task of the adolescent as one of ***identity versus role confusion.*** Thus, in Erikson's view, an adolescent's main questions are "Who am I?" and "Who do I want to be?"
- As adolescents work to form their identities, they ***pull away from their parents***, and the peer group becomes very important.
- Warm and healthy parent-child relationships have been associated with positive child outcomes, such as better grades and fewer school behavior problems.

4.3.4. ADULTHOOD

Adulthood begins around 20 years old and has ***three distinct stages***: early, middle, and late. Each stage brings its own set of rewards and challenges.

I. **Physical Development**

Early Adulthood (20-40 years): our physical maturation is complete, although our height and weight ***may increase slightly***. In young adulthood, ***our physical abilities are at their peak***, including ***muscle strength, reaction time, sensory abilities,*** and ***cardiac functioning***. Most professional athletes are at the top of their game during this stage. Many women have children in the young adulthood years, so they may see ***additional weight gain*** and ***breast changes.***

Middle Adulthood (40-60 years): Physical ***decline is gradual***. The skin loses some elasticity, and ***wrinkles*** are among the first signs of aging. ***Visual acuity*** decreases during this time. Women experience a ***gradual decline in fertility*** as they approach the ***onset of menopause***, the end of the menstrual cycle, around 50 years old. ***Both*** men and women tend to gain weight: in the abdominal area for men and in the hips and thighs for women. Hair begins to ***thin*** and turn ***gray***.

Late Adulthood (60 years and older): This is the last stage of physical change. The skin continues to lose elasticity, ***reaction time slows further***, and ***muscle strength diminishes.*** Smell, taste, hearing, and vision, so sharp in our twenties, ***decline significantly***. The brain may also ***no longer function at optimal levels***, leading to problems like memory loss, dementia, and Alzheimer's disease in later years.

II. Cognitive Development

Because we spend so many years in adulthood (more than any other stage),

- Cognitive changes of adults are ***numerous***. In fact, research suggests that adult cognitive development is a ***complex***, ever changing process that may be even more active than cognitive development in infancy and early childhood (Fischer, Yan, & Stewart, 2003).
- Cognitive abilities remain ***steady throughout early and middle adulthood***. Our crystalized intelligence (information, skills, and strategies we have gathered through a lifetime of experience) tends to hold steady as we age—it may even improve. For ***example***, adults show relatively stable to increasing scores on intelligence tests until their mid-30s to mid-50s (Bayley & Oden, 1955).
- ***In late adulthood we begin to experience a decline in another area of our cognitive abilities—fluid intelligence*** (information processing abilities, reasoning, and memory). These processes become slower.

III. Psychosocial Development

Some aspects of ***healthy*** aging include activities, ***social connectedness***, and the role of a person's culture.

- Adults tend to ***define themselves*** by what they do ***their careers.*** Earnings peak during this time, yet job satisfaction is more closely tied to work that involves contact with other people, is interesting, provides opportunities for advancement, and allows some independence.
- ***Positive relationships*** with significant others in our adult years have been found to contribute to a state of well-being.
- Having a ***stable marriage*** has also been found to contribute to well-being throughout adulthood.

Chapter Six
PERSONALITY
Learning Objectives
By the end of this section, you will be able to:

- Define personality
- Describe the assumptions of the psychodynamic perspective on personality development
- Define and describe the nature and function of the id, ego, and superego
- Define and describe the defense mechanisms
- Define and describe the psychosexual stages of personality development
- Discuss the concept of the inferiority complex
- Discuss Jung's ideas of the collective unconscious and archetypes
- Describe the behaviorist perspective on personality
- Describe the social cognitive perspective on personality
- Discuss the contributions of Abraham Maslow and Carl Rogers to personality development
- Discuss early trait theory of Allport
- Discuss the Big Five factors

Personality refers to the long-standing traits and patterns that push individuals to consistently think, feel, and behave in specific ways. Our personality is what makes us ***unique*** individuals. The word ***personality*** comes from the Latin word ***persona.*** In the ancient world, a persona was a ***mask*** worn by an actor.

6.1. FRUED'S THEORY OF PERSONALITY

Freud and the Psychodynamic Perspective

Sigmund Freud (1856–1939) was the ***first to systematically study*** and theorize the workings of the unconscious mind in the manner that we associate with modern psychology.

I. Levels for Consciousness

To explain the concept of conscious versus unconscious experience, Freud compared the mind to an iceberg. He said that only about one-tenth of our mind is ***conscious***, and the rest of our mind is ***unconscious***.

- ***Conscious*** refers we are currently thinking about and doing.
- ***Our unconscious*** refers to that mental activity of which we are ***unaware*** and are ***unable to access.*** According to Freud, unacceptable urges and desires are kept in our unconscious through a process called ***repression***. For ***example,*** we sometimes say things that we don't intend to say by unintentionally substituting another word for the one we meant.

According to Freud, ***our personality develops from a conflict between two forces:*** our biological aggressive and pleasure-seeking drives versus our internal (socialized) control over these drives. Our personality is the result of our efforts to balance these ***two competing forces***.

II. Structure of Personality

Freud suggested that we can understand this by imagining three interacting systems within our minds. He called them the id, ego, and superego.

1. Id

The unconscious ***id*** contains ***our most primitive drives or urges, and is present from birth***. It directs impulses for hunger, thirst, and sex. Freud believed that the id operates on what he called the ***"pleasure principle,"*** in which ***the id seeks immediate gratification***.

2. Superego

The **superego** develops as a child interacts with others, ***learning the social rules for right and wrong***. The superego acts as *our conscience;* it is our ***moral principle*** that tells us how we should behave. It strives for ***perfection*** and judges our behavior, leading to feelings of pride or when we fall short of the ***ideal feelings of guilt***.

3. Ego

The ***ego*** is the ***rational part*** of our personality. It's what Freud considered to be the ***self***, and it is the part of our personality that is seen by others. Its job ***is to balance the demands of the id and superego in the context of reality***; thus, it operates on what Freud called the "***reality principle***." The ***ego helps the id satisfy its desires in a realistic way.*** According to Freud, a person who has a ***strong ego***, which can balance the demands of the id and the superego, has a ***healthy personality***. Freud maintained that imbalances in the system can lead to ***neurosis*** (a tendency to experience negative emotions), anxiety disorders, or unhealthy behaviors. For ***example***, a person who is dominated by their id might be narcissistic and impulsive. A person with a dominant superego might be controlled by ***feelings of guilt*** and deny themselves even socially acceptable pleasures. The following hypothetical example illustrates how the three personality structures ***operate in real life*** situation.

- A six-year-old child spots his favorite candy in a supermarket.
- The id shouts - "I want it now! Take it!"
- The super ego - "You shall not steal."
- The ego - "I could ask my father to buy it for me, but he might say no."

III. Defense Mechanisms

Freud believed that feelings of ***anxiety result from the ego's inability to mediate the conflict between the id and superego***. When this happens, Freud believed that the ego seeks ***to restore balance through various protective measures*** known as defense mechanisms. ***Defense mechanisms,*** unconscious protective behaviors that aim to reduce anxiety. When we use defense mechanisms, we are unaware that we are using them. Further, they operate in various ways that distort reality. According to Freud, we all use ego defense mechanisms.

There are several different types of defense mechanisms. Let us brief discuss some of them:

1. ***Compensation*** involves covering up weaknesses by emphasizing a more desirable trait or by overachievement in a more comfortable area. For **Example**, A person who is very shy may work very hard in school in order to gain recognition.
2. ***Repression*** involves keeping something upsetting out of our conscious mind. For ***example***, a teenager, seeing his best friend killed in a car accident, becomes amnesic about the circumstances surrounding the accident.

3. ***Denial*** involves refusing to accept reality. For ***example***, Parents of mentally retarded child say son was of a different species, and in the end would be superior (could be escape into reality).
4. ***Reaction formation*** involves reacting in a manner opposite to one's feelings as a safeguard against the discovery of one's true feelings. For ***example,*** suppose a young woman, Halwo, deeply dislikes her mother-in-law, Ardo. This is difficult for her to accept, so Halwo might repress this feeling and behave as though she thinks Ardo is her favorite person in the world, perhaps greeting her warmly, complimenting her, and treating her like royalty.
5. ***Rationalization*** refers to ***generating an excuse*** to try to justify behavior that would typically be viewed as wrong. For ***example,*** If a person fails an exam, they may excuse themselves from blame by rationalizing that they were too busy to revise during the revision period.
6. ***Projection*** occurs when ***we project our undesirable characteristics onto other people***. For ***example***, a mother is told her child must repeat a grade in school, and she blames this on the teacher's poor instruction.
7. ***Displacement*** involves redirecting behaviors or feelings that would be distressing toward a more acceptable target. For ***example***, a husband and wife are fighting, and the husband becomes so angry he hits a door instead of his wife. A student gets a C on a paper she worked hard on and goes home and yells at her family.
8. ***Sublimation*** involves translating a distressing desire into an acceptable form. For ***example***, A person with excessive, primitive sexual drives invests psychic energy into a well-defined religious value system.
9. ***Regression,*** an individual acts much younger than their age. For ***example***, a four-year-old child who resents the arrival of a newborn sibling may act like a baby and revert to drinking out of a bottle.

IV. Stages of Psychosexual Development

Freud believed that ***personality develops during early childhood***: Childhood experiences shape our personalities as well as our behavior as adults. Each of us must pass through these childhood stages, and ***if we do not have the proper nurturing and parenting during a stage, we will be stuck, or fixated, in that stage, even as adults.***

In each ***psychosexual stage of development,*** the child's pleasure-seeking urges, coming from the id, are

focused on a different area of the body, called an ***erogenous zone.*** The stages are oral, anal, phallic, latency, and genital.

1. Oral Stage(0-1 ½ years)

In the ***oral stage***, pleasure is focused on the ***mouth***. Eating and the pleasure derived from sucking (nipples, and thumbs) play a large part in a baby's first year of life. According to Freud, an adult who smokes, drinks, overeats, or bites her nails is ***fixated*** in the oral stage of her psychosexual development.

2. Anal Stage(1 ½ -3 years)

After passing through the oral stage, children enter what Freud termed the **anal stage**. In this stage, children experience pleasure in their ***bowel*** and ***bladder movements***, so it makes sense that the conflict in this stage is over ***toilet training***.

- Freud suggested that ***success*** at the anal stage depended on ***how parents handled toilet training.***

- Parents who offer ***praise*** and ***rewards*** encourage positive results and can help children feel competent.
- Parents who are ***harsh*** in toilet training can cause a child to ***become fixated*** at the anal stage, leading to the development of an ***anal-retentive personality.***
- The anal-retentive personality is ***stingy***, has a compulsive need for order and ***neatness***, and might be considered a ***perfectionist***.
- If parents are too ***soft*** in toilet training, the child might also become ***fixated*** and display an ***anal-expulsive personality.*** The anal-expulsive personality is ***messy***, ***careless***, disorganized, and prone to ***emotional outbursts.***

3. Phallic Stage (3–6 years)

Freud's third stage of psychosexual development is the ***phallic stage*****,** corresponding to the age when children become aware of their bodies and ***recognize the differences between boys and girls***. The ***erogenous zone*** in this stage is the ***genitals***. Conflict arises when the child feels ***a desire for the opposite sex parent***, and ***jealousy and hatred toward the same-sex parent.*** For boys, this is called the ***Oedipus complex,*** involving a boy's desire for his mother and his urge to replace his father who is seen as ***a rival*** for the mother's attention. At the same time, the boy is afraid his father will punish him for his feelings, so he experiences ***castration anxiety*****.** The Oedipus complex is ***successfully resolved when the boy begins to identify with his father as an indirect way to have the mother.*** Failure to resolve the Oedipus complex may result in ***fixation*** and development of a personality that might be described as ***vain*** and ***overly ambitious***.

Girls experience a comparable conflict in the phallic stage—***the Electra complex***. A girl desires the attention of her father and wishes to take her mother's place. Freud also said that girls are angry with the mother for not providing them with a penis—hence the term ***penis envy*****.**

4. Latency Period (6 -12 years).

Following the phallic stage of psychosexual development is a period known as the ***latency period.*** This period is ***not*** considered a stage, because sexual feelings are ***inactive*** as children focus on other pursuits, such as ***school, friendships, hobbies,*** and ***sports.*** Children generally engage in activities with ***peers of the same sex***, which serves to consolidate a ***child's gender-role identity.***

5. Genital Stage(from puberty on).

The final stage is the ***genital stage***. In this stage, there is a sexual ***reawakening***. The young person ***redirects these urges to other, more socially acceptable partners*** (who often resemble the other-sex parent). People in this stage have ***mature sexual interests***, which for Freud meant a ***strong desire for the opposite sex***. Individuals who successfully completed the previous stages, reaching the genital stage with ***no fixations,*** are said to be ***well-balanced, healthy adults***.

6.2. NEO-FREUDIANS: ADLER AND JUNG

Freud attracted ***many followers*** who modified his ideas to create new theories about personality. These theorists, referred to as ***neo-Freudians***, generally agreed with Freud that childhood experiences matter, but ***deemphasized sex***, focusing more on the ***social environment*** and effects of ***culture on personality***.

6.2.1. ALFRED ADLER'S INDIVIDUAL PSYCHOLOGY (1870-1937)

Alfred Adler, was the ***first major theorist to break away from Freud***. He subsequently founded a school of psychology called ***individual psychology***, which focuses on our drive ***to compensate for feelings of inferiority.***

- Adler proposed the concept of the ***inferiority complex***. An inferiority complex refers to a person's feelings that they ***lack worth*** and don't measure up to the standards of others or of society.
- Adler believed that ***feelings of inferiority*** in childhood are ***what drive people to attempt to gain superiority*** and that this ***striving*** is the force behind all of our thoughts, emotions, and behaviors.

Adler also believed in the ***importance of social connections***, seeing childhood development emerging through social development. Adler noted the ***interrelatedness of humanity*** and the need to work together for the betterment of all. He said with the main goal of psychology being ***"to recognize the equal rights and equality of others".***

Adler identified ***three fundamental social tasks*** that all of us must experience: ***occupational tasks*** (careers), ***societal tasks*** (friendship), and ***love tasks*** (finding an intimate partner for a long-term relationship). He also ***emphasized conscious rather than unconscious motivation.***

One of Adler's major contributions to personality psychology was the idea that our ***birth order*** shapes our personality. He proposed that ***older siblings***, who start out as the focus of their parents' attention but must share that attention once a new child joins the family, compensate by becoming ***overachievers.*** The

youngest children, according to Adler, may be spoiled, leaving the ***middle child*** with the opportunity to minimize the negative dynamics of the youngest and oldest children.

6.2.2. THE ANALYTIC PSYCHOLOGY OF CARL JUNG (1875-1961)

Carl Jung was a ***Swiss psychiatrist*** and follower of Freud, who later split off from Freud and developed his own theory, which he called ***analytical psychology***.

- The focus of analytical psychology is on ***working to balance opposing forces of conscious and unconscious thought,*** and experience within one's personality.
- According to Jung, this work is a ***continuous learning process***, mainly occurring in the ***second half of life*** of becoming aware of unconscious elements and integrating them into consciousness.

Jung's split from Freud was based on ***two major disagreements***.

- ***First***, Jung, like Adler, ***did not accept that sexual drive was the primary motivator*** in a person's mental life.
- ***Second***, although Jung agreed with Freud's concept of a ***personal unconscious,*** he thought it to be incomplete. In addition to the personal unconscious, Jung focused on the ***collective unconscious.***

The ***collective unconscious*** is a universal version of the personal unconscious, holding mental patterns, or memory traces, which are ***common*** to all of us. These ***ancestral***

memories, which Jung called ***archetypes***, are represented by universal themes in various cultures, as expressed through literature, art, and dreams.

- Jung said that these themes reflect ***common experiences of people*** the world over, such as facing ***death***, ***becoming independent***, and ***striving for mastery.***
- Jung believed that through ***biology***, each person is handed down the same themes and that the same types of symbols—such as the ***hero***, the ***maiden***, the ***wise***, and the ***trickster*** are present in the folklore and fairy tales of every culture.

In Jung's view, the task of ***integrating*** these unconscious archetypal aspects of the ***self is part*** of the self-realization process in the ***second half*** of life.

- With this orientation toward ***self-realization,*** Jung parted ways with Freud's belief that personality is determined solely by past events and anticipated the humanistic movement with its emphasis on self-actualization and orientation toward the ***future***.

Jung also proposed ***two attitudes*** or approaches toward life: ***extroversion*** and ***introversion***. These ideas are considered Jung's ***most important contributions*** to the field of personality psychology, as almost all models of personality now include these concepts. If you are an ***extrovert***, then you are a person who is energized by being outgoing and socially oriented: You derive your energy from being around others. If you are an ***introvert***, then you are a person who may be quiet and reserved, or you may be social, but your energy is derived from your inner psychic activity.

- Jung believed a ***balance between extroversion and introversion*** best served the ***goal of self-realization***.

Introverts and Extroverts	
Introvert	***Extrovert***
Energized by being alone	Energized by being with others
Avoids attention	Seeks attention
Speaks slowly and softly	Speaks quickly and loudly
Thinks before speaking	Thinks out loud
Stays on one topic	Jumps from topic to topic
Prefers written communication	Prefers verbal communication
Pays attention easily	Distractible
Cautious	Acts first, thinks later

6.3. LEARNING APPROACHES

6.3.1. THE BEHAVIORAL PERSPECTIVE

B. F. Skinner believed that ***environment was solely responsible for all behavior, including the enduring***, consistent behavior patterns studied by personality theorists. In other words, we ***learn*** to behave in particular ways. We increase the behaviors that lead to ***positive consequences***, and we decrease the behaviors that lead to ***negative consequences. Reinforcements and punishments are factors that shape our personality. in her environment changes.***

6.3.2. OBSERVATIONAL LEARNING

Bandura's key contribution to learning theory was the idea that much learning is ***vicarious***. ***We learn by observing someone else's behavior and its consequences,*** which Bandura called observational learning. He felt that this type of learning also plays a part in the development of our personality. Just as we learn individual behaviors, we learn new behavior patterns when we see them performed by other people or ***models.***

- Bandura suggested that whether we choose to ***imitate*** a model's behavior depends on whether we see the ***model reinforced*** or ***punished***.
- Observational learning, we come to learn what behaviors are ***acceptable*** and ***rewarded*** in our culture.
- We also learn to ***inhibit*** deviant or socially unacceptable behaviors by seeing what behaviors are punished.

We can see the principles of reciprocal determinism at work in observational learning. For ***example,*** personal factors determine which behaviors in the environment a person chooses to imitate, and those environmental events in turn are processed cognitively according to other personal factors.

Self-Efficacy

Self-efficacy is our level of confidence in our own abilities, developed through our social experiences. Self-efficacy ***affects how we approach challenges and reach goals***.

- In observational learning, self-efficacy is a ***cognitive factor*** that affects which behaviors we choose to imitate as well as our success in performing those behaviors.
- People who have ***high self-efficacy*** believe that their goals are within reach, have a positive view of challenges seeing them as tasks to be mastered, develop a deep interest in and strong commitment to the activities in which they are involved, and quickly recover from setbacks.
- People with ***low self-efficacy*** avoid challenging tasks because they doubt their ability to be successful, tend to focus on failure and negative outcomes, and lose confidence in their abilities if they experience setbacks.

Feelings of self-efficacy can be ***specific*** to certain situations. For ***instance***, a student might feel confident in her ability in English class but much less so in math class.

6.3.3. JUKIAN ROTTER AND LOCUS OF CONTROL

Julian Rotter proposed the concept of ***locus of control***, another cognitive factor that affects ***learning*** and ***personality development***. ***Locus of control*** refers to our beliefs about the power we have over our lives. In Rotter's view, people possess either an ***internal*** or an ***external locus of control***.

- Those of us with an internal locus of control ("***internals***") tend ***to believe that most of our outcomes are the direct result of our efforts.***
- Those of us with an external locus of control (***"externals***") tend ***to believe that our outcomes are outside of our control.*** Externals see their lives as being controlled by other people, luck, or chance.

For ***example***, say you didn't spend much time studying for your psychology test and went out to dinner with friends instead. When you receive your test score, you see that you earned a D. If you possess an internal locus of control, you would most likely admit that you failed because you didn't spend enough time studying and decide to study more for the next test. On the other hand, if you possess an external locus of control, you might

conclude that the test was too hard and not bother studying for the next test, because you figure you will fail it anyway.

6.4. HUMANISTIC APPROACHES

This perspective focuses on how healthy people develop. One pioneering humanist, Abraham Maslow, ***studied*** people who he considered to be ***healthy***, ***creative,*** and ***productive***, including Albert Einstein, Eleanor Roosevelt, Thomas Jefferson, Abraham Lincoln, and others.

- Maslow found that such people ***share similar characteristics***, such as being open, creative, loving, spontaneous, compassionate, concerned for others, and accepting of themselves.
- ***Maslow's hierarchy of needs theory***, in which Maslow proposes that human beings have ***certain needs in common*** and that these needs must be ***met in a certain order.***
- The highest need is the need for ***self-actualization,*** which is the achievement of our fullest potential.

Another humanistic theorist was ***Carl Rogers.*** One of Rogers's main ideas about personality regards ***self-concept***, our thoughts and feelings about ourselves. How would you respond to the question, "***Who am I?"*** Your answer can show how you see yourself. If your response is primarily positive, then you tend to feel good about who you are, and you see the world as a safe and positive place. If your response is mainly negative, then you may feel unhappy with who you are. Rogers further divided the self into ***two categories***: the ideal self and the real self. The ***ideal self*** is the person that you would like to be; the ***real self*** is the person you actually are. Rogers focused on the idea that we need to achieve consistency between these two selves. We experience ***congruence*** when our thoughts about our real self and ideal self are very similar—in other words, when our self-concept is accurate**.** High congruence leads to a greater sense of self-worth and a healthy, productive life. Parents can help their children achieve this by giving them ***unconditional positive regard,*** or ***unconditional love***. According to Rogers (1980), "***As persons are accepted and prized, they tend to develop a more caring attitude towards themselves***". Conversely, when there is a great discrepancy between our ideal and actual selves, we experience a state Rogers called ***incongruence***, which can lead to ***maladjustment.*** Both Rogers's and Maslow's theories focus on individual and choices do not believe that biology is deterministic.

6.5. TRAIT THEORIES

Trait theorists believe personality can be understood via the approach that all people have certain ***traits***, or characteristic ways of behaving. Do you tend to be sociable or shy? Passive or aggressive? Optimistic or pessimistic? Moody or even-tempered?

6.5.1. GORDON ALLPORT

Early trait theorists tried to describe all human personality traits. For example, one trait theorist, ***Gordon Allport (1936),*** found 4,500 words in the English language that could describe people. He organized these personality traits into ***three categories:*** cardinal traits, central traits, and secondary traits.

- ***A cardinal trait*** is one that dominates your entire personality, and hence your life—such as ***Mother Theresa's altruism***. ***Cardinal traits are not very common:*** Few people have personalities dominated by a single trait. Instead, our personalities typically are composed of multiple traits.

- ***Central traits*** are those that make up our personalities (such as loyal, kind, agreeable, friendly, sneaky, wild, and grouchy).
- ***Secondary traits*** are those that are not quite as obvious or as consistent as central traits. They are present under ***specific circumstances*** and include preferences and attitudes such food, music and etc.

6.5.2. FIVE FACTOR MODEL

The ***Five Factor Model*** is also called the ***Big Five*** personality traits. It is the ***most popular theory*** in personality psychology today and the most accurate approximation of the basic trait dimensions. The five traits are ***openness to experience, conscientiousness, extroversion, agreeableness,*** and ***neuroticism.***

- ***Openness to experience*** is characterized by imagination, feelings, actions, and ideas. People who score high on this trait tend to be curious and have a wide range of interests.
- ***Conscientiousness*** is characterized by competence, self-discipline, thoughtfulness, and achievement-striving (goal-directed behavior). People who score high on this trait are hardworking and dependable.
- ***Extroversion*** is characterized by sociability, assertiveness, excitement-seeking, and emotional expression. People who score high on this trait are usually described as outgoing and warm.
- ***Agreeableness,*** which is the tendency to be pleasant, cooperative, trustworthy, and good-natured. People who score low on agreeableness tend to be described as rude and uncooperative.
- ***Neuroticism***, which is the tendency to experience negative emotions. People high on neuroticism tend to experience emotional instability and are characterized as angry, impulsive, and hostile.

Chapter Seven
SOCIAL PSYCHOLOGY
Learning Objectives
By the end of this section, you will be able to:

- Define social psychology
- Describe the fundamental attribution error
- Define attitude
- Describe how people's attitudes are internally changed through cognitive dissonance
- Explain how people's attitudes are externally changed through persuasion
- Describe the peripheral and central routes to persuasion
- Define and distinguish among prejudice, stereotypes, and discrimination
- Provide examples of prejudice, stereotypes, and discrimination
- Explain why prejudice and discrimination exist
- Describe conditions that influence the formation of relationships
- Identify what attracts people to each other
- Describe the triangular theory of love
- Explain social exchange theory in relationships.

7.1. WHAT IS SOCIAL PSYCHOLOGY

Social psychology examines how people affect one another, and it looks at the power of the situation. ***Social psychologists assert that an individual's thoughts, feelings, and behaviors are very much influenced by social situations.***
Behavior is a product of ***both*** the situation (e.g., cultural influences, social roles, and the presence of bystanders) and of the person (e.g., personality characteristics).
According to some social psychologists, people tend to overemphasize internal factors as explanations or attributions for the behavior of other people. They ***underestimate the power of the situation*** on the behavior of others. This erroneous assumption is called the ***fundamental attribution error***.

- The fundamental attribution error is considered a powerful influence in how we explain the behaviors of others.

Do people in all cultures commit the fundamental attribution error?

- People from an ***individualistic culture***, that is, a culture that focuses on individual achievement and autonomy, have the greatest tendency to commit the fundamental attribution error. (western countries such as the United States, Canada, and the United Kingdom).
- People from a ***collectivistic culture,*** that is, a culture that focuses on communal relationships with others, such as family, friends, and community, are less likely to commit the fundamental attribution error (east Asian countries and in Latin American and African countries).

Some of the fundamental attribution errors are:

1. **Actor-Observer Bias**

The actor-observer bias is the phenomenon of ***attributing other people's behavior to internal factors*** (fundamental attribution error) ***while attributing our own behavior to situational forces***.

2. **Self-Serving Bias**

Self-serving bias are those attributions that enable us to see ***ourselves in favorable light*** (for ***example,*** making internal attributions for success and external attributions for failures). When you do well at a task, for example acing an exam, "I'm smart,". This bias serves to protect self-esteem.

3. **Just-World Hypothesis**

The just-world hypothesis is the ***belief that people get the outcomes they deserve***. For ***example***, if you want to experience positive outcomes, you just need to work hard to get ahead in life. "The poor are lazy and just don't want to work" or "Poor people just want to live off the government".

7.2. ATTITUDES AND PERSUASION

Attitude is our evaluation of a person, an idea, or an object. Attitudes are favorable or unfavorable: positive or negative. And, they have ***three components***: an ***affective component*** (feelings), a ***behavioral component*** (the effect of the attitude on behavior), and a ***cognitive component*** (belief and knowledge).

For ***example***, you may hold a positive attitude toward recycling. This attitude should result in positive feelings toward recycling (such as "***It makes me feel good to recycle***" or "I enjoy knowing that I make a small difference in reducing the amount of waste that ends up in landfills"). Certainly, this attitude should be reflected in our behavior: You actually recycle as often as you can. Finally, this attitude will be reflected in favorable thoughts (for ***example, "Recycling is good for the environment"*** or ***"Recycling is the responsible thing to do").***

Our attitudes and beliefs are not only influenced by external forces, but also by internal influences that we control. In this section we discuss the conditions under which we would want to change our own attitudes and beliefs.

Cognitive dissonance as psychological discomfort arising from holding two or more inconsistent attitudes, behaviors, or cognitions (thoughts, beliefs, or opinions). For ***example,*** if you believe smoking is bad for your health but you continue to smoke, you experience conflict between your belief and behavior.

When we experience cognitive dissonance, we are motivated to decrease it because it is psychologically, physically, and mentally uncomfortable. ***We can reduce cognitive dissonance by bringing our cognitions, attitudes, and behaviors in line***—that is, making them harmonious. This can be done in ***different ways,*** such as:

- ***changing our discrepant behavior*** (e.g., stop smoking),
- changing our cognitions through ***rationalization or denial*** (e.g., telling ourselves that health risks can be reduced by smoking filtered cigarettes),
- ***adding a new cognition*** (e.g., "Smoking suppresses my appetite so I don't become overweight, which is good for my health.").

7.2.1. PERSUASION

Persuasion is the process of changing our attitude toward something based on some kind of communication. Much of the persuasion we experience comes from ***outside forces***.

- How do people convince others to change their attitudes, beliefs, and behaviors?
- What communications do you receive that attempt to persuade you to change your attitudes, beliefs, and behaviors?

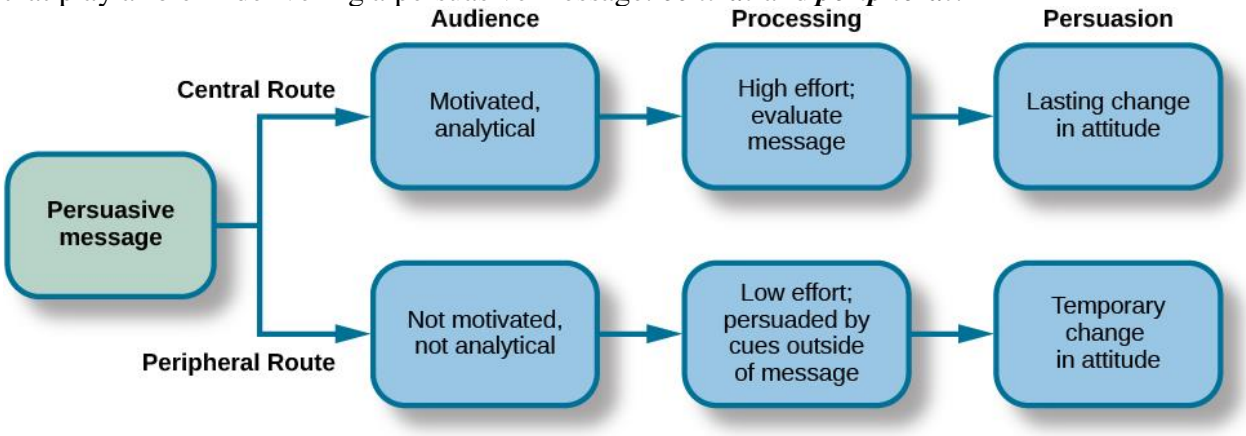
I. Yale Attitude Change Approach

During the Second World War, ***Carl Hovland*** extensively researched persuasion for the U.S. Army. Out of this work came a model called the Yale attitude change approach, ***which describes the conditions under which people tend to change their attitudes***. Hovland demonstrated that ***certain features*** of the ***source*** of a persuasive message, the ***content*** of the message, and the ***characteristics*** of the audience will influence the persuasiveness of a message.

- ***Features of the source*** of the persuasive message include the ***credibility*** of the speaker and the ***physical attractiveness*** of the speaker. The use of famous to advertise products on television and in print relies on this principle. The ***immediate*** and ***long term impact*** of the persuasion also depends, however, on the credibility of the messenger.
- ***Features of the message*** itself that affect persuasion include ***subtlety*** (the quality of being important, but not obvious) ; ***sidedness*** (that is, having more than one side); ***timing*** and whether both sides are presented. Messages that are more ***subtle*** are more persuasive than direct messages.
- ***Features of the audience*** that affect persuasion are ***attention***, ***intelligence, self-esteem*** and ***age***. In order to be persuaded, audience members must be ***paying attention.*** People with ***lower intelligence*** are more easily persuaded than people with higher intelligence; whereas people with ***moderate self-esteem*** are more easily persuaded than people with higher or lower self-esteem. Finally, ***younger adults*** aged 18–25 are more persuadable than older adults.

II. Elaboration Likelihood Model

According to the elaboration likelihood model of persuasion, there are ***two*** main routes that play a role in delivering a persuasive message: ***central*** and ***peripheral***.



Persuasion can take one of two paths, and the durability of the end result depends on the path.

The ***central route*** is ***logic*** driven and uses data and facts to convince people of an argument's worthiness. For ***example***, a car company seeking to persuade you to purchase their model will emphasize the car's safety features and fuel economy. This is a ***direct route*** to persuasion that focuses on ***the quality of the information***. In order for the central route of persuasion to be effective in changing attitudes, thoughts, and behaviors, the argument must be ***strong*** and, if successful, will result in ***lasting*** attitude change.

The central route to persuasion works best when the target of persuasion, or the audience, is ***analytical*** and ***willing to engage*** in processing of the information. One ***example*** is buying a computer. It is likely, for example, that small business owners might be especially influenced by the focus on the computer's quality and features such as processing speed and memory capacity.

The peripheral route is an ***indirect route*** that uses peripheral cues to associate positivity with the message. Instead of focusing on the facts and a product's quality, the peripheral route relies on ***association*** with ***positive*** characteristics such as ***positive emotions*** and ***celebrity endorsement.*** For ***example***, having a popular athlete advertise athletic shoes is a common method used to encourage young adults to purchase the shoes. This route to attitude change ***does not require much effort or information*** processing. This method of persuasion may promote positivity toward the message or product, but it typically results in ***less permanent attitude or behavior change***. The audience does not need to be analytical or motivated to process the message. Another ***example*** is clothing: A retailer may focus on celebrities that are wearing the same style of clothing.

III. Foot-in-the-door Technique

Researchers have tested many persuasion strategies that are effective in selling products and changing people's attitude, ideas, and behaviors. One effective strategy is the foot-in-the-door technique . Using the ***foot-in-the-door technique***, the persuader gets a person to agree to bestow a small favor or to buy a small item, only to later request a larger favor or purchase of a bigger item. ***Our past behavior*** often directs our future behavior, and we have a desire to maintain consistency once we have a committed to a behavior.

A common application of foot-in-the-door is when teens ask their parents for a small permission (for ***example***, extending curfew by a half hour) and then asking them for something larger.

7.3. PREJUDICE AND DISCRIMINATION

Prejudice and discrimination often are root causes of ***human conflict***. Prejudice and discrimination affect everyone.

Understanding Prejudice and Discrimination

Prejudice is a ***negative attitude and feeling*** toward an individual based solely on one's ***membership in a particular social group***. ***Factors*** that contribute prejudice may include gender, race, ethnicity, nationality, social class, religion, sexual orientation, profession, and many more.

Prejudice often begins in the form of a ***stereotype***—that is, a ***negative belief*** about individuals based solely on their membership in a group, regardless of their individual characteristics. For ***example,*** black male athletes are often believed to be more athletic, yet less intelligent, than their White male counterparts.

Discrimination is ***negative action*** toward an individual as a result of one's membership in a particular group.

Connecting Stereotypes, Prejudice, and Discrimination			
Item	***Function***	***Connection***	***Example***
Stereotype	***Cognitive;*** thoughts about people	Overgeneralized beliefs about people may lead to prejudice.	"Black Americans are arrogant and obnoxious."
Prejudice	***Affective;*** feelings about people, both positive and negative	Feelings may influence treatment of others, leading to discrimination.	"I hate Black Americans; they make me angry."
Discrimination	***Behavior;*** positive or negative treatment of others."	Holding stereotypes and harboring prejudice may lead to excluding, avoiding, and biased treatment of group members.	"I would never hire nor become friends with a person if I knew he or she were a Black Americans."

Why do Prejudice and Discrimination exist?

Prejudice and discrimination persist in society due to ***social learning*** and ***conformity*** to social norms.

- ***A self-fulfilling prophecy*** is an expectation held by a person that alters his or her behavior in a way that tends to make it true. When we hold stereotypes about a person, we tend to treat the person according to our expectations.
- ***Confirmation bias***, we seek out information that supports our stereotypes and ignore information that is inconsistent with our stereotypes.
- ***An in-group*** is a group that we identify with or see ourselves as belonging to. we develop ***in-group bias:*** a preference for our own group over other groups.
- ***an out-group*** is a group that we view as fundamentally different from us. For ***example***, ***Scapegoating*** is the act of blaming an out-group when the in group experiences frustration or is blocked from obtaining a goal.

7.4. PROSOCIAL BEHAVIOR

I. Forming Relationships

What do you think is the single most influential factor in determining with whom you become friends and whom you form romantic relationships?

- This most important factor is ***proximity.*** You are more likely to be friends with people you have regular contact with.
- ***Similarity***: We are more likely to become friends or lovers with someone who is similar to us in background, attitudes, and lifestyle.
- ***Reciprocity*** is the give and take in relationships. We contribute to relationships, but we expect to receive benefits as well.
- ***Self-disclosure*** is the sharing of personal information. We form more intimate connections with people with whom we disclose important information about ourselves.

II. Attraction

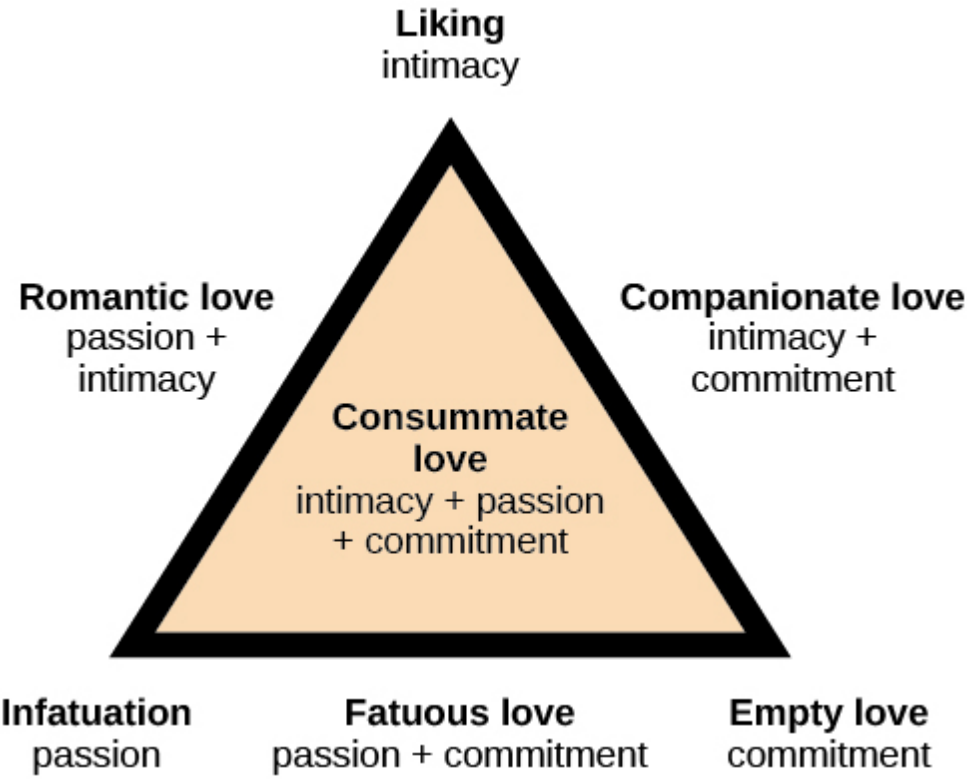
What features of a person do we find attractive? Researchers have documented several characteristics in men and women that humans find attractive.

- First we look for friends and lovers who are ***physically attractive.*** People differ in what they consider attractive, and attractiveness is ***culturally influenced***.
- The ***matching hypothesis*** which asserts that people tend to pick someone they view as their equal in physical attractiveness and social desirability.
- ***Social traits*** that people find attractive in potential ***female mates*** include warmth, affection, and social skills; in ***males***, the attractive traits include achievement, leadership qualities, and job skills.

III. Sternberg's Triangular Theory of Love

We typically love the people with whom we form relationships, but the type of love we have for our family, friends, and lovers differs. Robert Sternberg proposed that there are ***three components*** of love: ***intimacy, passion***, and ***commitment***. These three components form a triangle that defines multiple types of love: this is known as ***Sternberg's triangular theory of love***.

- ***Intimacy*** is the sharing of details and intimate thoughts and emotions.
- ***Passion*** is the physical attraction the flame in the fire.
- ***Commitment*** is standing by the person the "in sickness and health" part of the relationship.



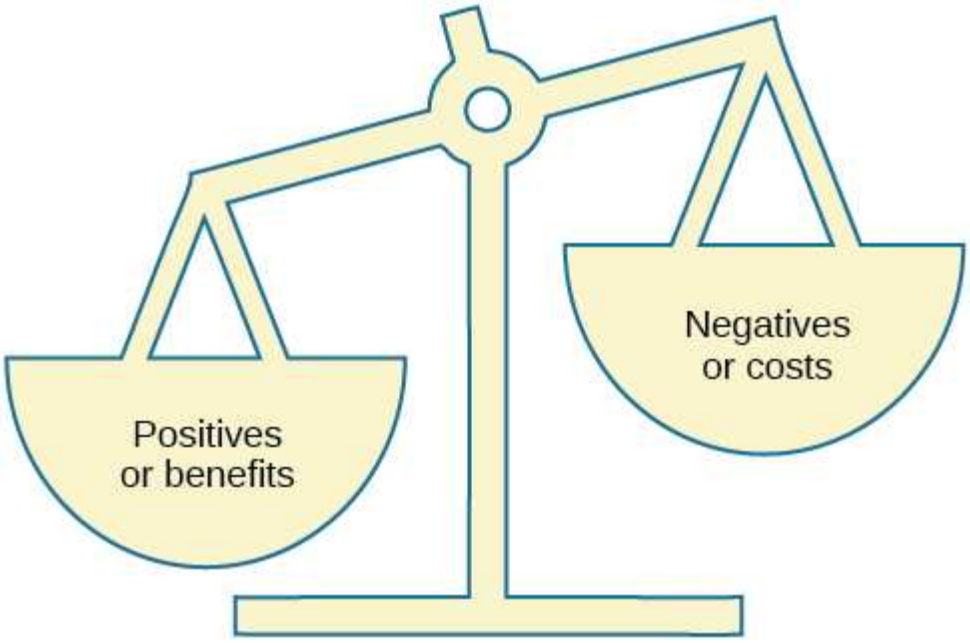
According to Sternberg's triangular theory of love, seven types of love can be described from combinations of three components: intimacy, passion, and commitment.

Sternberg (1986) states that a healthy relationship will have all ***three components of love***: intimacy, passion, and commitment, which is described as ***consummate love***.
However, different aspects of love might be more prevalent at different life stages.

- ***Liking,*** which is defined as having intimacy but no passion or commitment.
- ***Infatuation*** is the presence of passion without intimacy or commitment.
- ***Empty love*** is having commitment without intimacy or passion.
- ***Companionate love,*** which is characteristic of ***close friendships*** and ***family relationships***, consists of intimacy and commitment but no passion.
- ***Romantic love*** is defined by having passion and intimacy, but no commitment.
- ***Fatuous love*** is defined by having passion and commitment, but no intimacy, such as a long term sexual love affair.

IV. Social Exchange Theory

We have discussed why we form relationships, what attracts us to others, and different types of love. ***But what determines whether we are satisfied with and stay in a relationship***? One theory that provides an explanation is social exchange theory. According to ***social exchange theory***, we act as economists in keeping a tally of the ratio of costs and benefits of forming and maintaining a relationship with others.



Acting like economists, people may keep track of the costs and benefits of maintaining a relationship. Typically, only those relationships in which the benefits outweigh the costs will be maintained.

- People are motivated to ***maximize*** the benefits of social exchanges, or relationships, and minimize the costs.
- People prefer to have ***more benefits than costs,*** or to have ***nearly equal costs and benefits,*** but most people are dissatisfied if their social exchanges create more costs than benefits.

Let's discuss an ***example.*** If you have ever decided to commit to a romantic relationship, you probably considered the advantages and disadvantages of your decision. What are the

benefits of being in a committed romantic relationship? You may have considered having companionship, intimacy, and passion, but also being comfortable with a person you know well. What are the costs of being in a committed romantic relationship? You may think that over time boredom from being with only one person may set in; moreover, it may be expensive to share activities such as attending movies and going to dinner. However, the benefits of dating your romantic partner presumably outweigh the costs, or you wouldn't continue the relationship.

Chapter Eight
STRESS
Learning Objectives
By the end of this section, you will be able to:

- Differentiate between stimulus-based and response-based definitions of stress
- Define stress as a process
- Differentiate between good stress and bad stress
- Describe different types of possible stressors
- Explain the importance of life changes as potential stressors
- Explain the nature of psychophysiological disorders
- Describe how stress and emotional factors can lead to the development and exacerbation of cardiovascular disorders, asthma, and tension headaches
- Define coping and differentiate between problem-focused and emotion-focused coping
- Describe the importance of perceived control in our reactions to stress
- Explain how social support is vital in health.

8.1. WHAT IS STRESS?

Researchers have had a difficult time agreeing on an acceptable definition of stress.
Some have conceptualized ***stress as a demanding or threatening event or situation*** (e.g., a high-stress job, overcrowding, and long commutes to work). Such conceptualizations are known as ***stimulus-based*** definitions because they characterize stress as a ***stimulus that causes certain reactions***. For ***example***, a hardworking student who has studied diligently all semester would likely experience less stress during final exams week than would a less responsible, unprepared student.
Others have conceptualized stress ***in ways that emphasize the physiological responses that occur when faced with demanding or threatening situations.*** These conceptualizations are referred to as ***response-based*** definitions because they describe ***stress as a response to environmental conditions.***
Neither stimulus based nor response-based definitions provide a complete definition of stress.
Stress is ***to view it as a process whereby an individual perceives and responds to events that he appraises as overwhelming or threatening to his well-being***.
Two kinds of appraisals of a stressor are especially important in this regard: ***primary*** and ***secondary appraisals.***

- ***A primary appraisal*** involves judgment about the degree of potential harm or threat to well-being that a stressor might entail.
- ***A secondary appraisal*** involves judgment of the options available to cope with a stressor, as well as perceptions of how effective such options will be.

For ***Example,*** imagine that two middle-aged women, Hawa and Ardo, perform breast self-examinations one morning and each woman notices a ***lump*** on the lower region of her left breast. Although both women view the breast lump as a ***potential threat*** (primary appraisal), their ***secondary appraisals*** differ considerably. In considering the breast lump, some of the thoughts racing through ***Hawa's mind are***, "Oh my God, I could have breast cancer! What if the cancer has spread to the rest of my body and I cannot recover? What if I have to go through chemotherapy? I have heard that experience is awful! What if I

have to quit my job? My husband and I won't have enough money to pay the mortgage. Oh, this is just horrible…I can't deal with it!" ***On the other hand, Ardo thinks,*** "This may not be good. I need to have it checked out. If it turns out to be breast cancer, there are doctors who can take care of it because the medical technology today is quite advanced. I will have a lot of different options, and Iwill be just fine." Clearly, Hawa and Ardo have different outlooks on what might turn out to be a very serious situation: Hawa seems to think that little could be done about it, whereas Ardo believes that, worst case scenario, a number of options that are likely to be effective would be available. As such, Hawa would clearly experience greater stress than would Ardo.

In short, ***stress is largely in the eye of the beholder:*** it is not so much what happens to you as it is how you respond.

Good Stress: Stress can motivate us to do things in our best interests, such as study for exams, visit the doctor regularly, exercise, and perform to the best of our ability at work. For ***example,*** Students may be motivated and energized before a major exam.

The Prevalence of Stress: Stress is an experience that evokes a variety of responses, including those that are ***physiological*** (e.g., accelerated heart rate, headaches, or gastrointestinal problems), ***cognitive*** (e.g., difficulty concentrating or making decisions), and ***behavioral*** (e.g., drinking alcohol, smoking, or taking actions directed at eliminating the cause of the stress).

- Although stress can be ***positive*** at times, it can have ***deleterious*** health implications, contributing to the onset and progression of a variety of physical illnesses and diseases.

8.2. STRESSORS

Stressors are environmental events that may be judged as threatening or demanding; stimuli that initiate the stress process. In general, stressors can be placed into one of ***two broad categories***: chronic and acute.

- ***Chronic stressors*** include ***events that persist over an extended period of time,*** such as caring for a parent with dementia, long-term unemployment, or imprisonment.
- ***Acute stressors*** involve ***brief focal events*** that sometimes continue to be experienced as overwhelming well after the event has ended, such as breaking your leg.

Whether chronic or acute, potential stressors come in ***many shapes and sizes.*** They can include major traumatic events, significant life changes, daily hassles, as well as other situations in which a person is regularly exposed to threat, challenge, or danger.

1. Traumatic Events

Some stressors involve traumatic events or situations in which a person is exposed to actual or threatened ***death*** or ***serious injury.*** Stressors in this category include exposure to ***military combat, threatened*** or ***actual physical assaults*** (e.g., physical attacks, sexual assault, robbery, childhood abuse), ***terrorist attacks, natural disasters*** (e.g., earthquakes, floods), and ***automobile accidents***.

2. Life Changes

Many potential stressors we face involve events or situations that require us to make changes in our ongoing lives and require time as we adjust to those changes. ***Examples*** include death of a close family member, marriage, divorce, and moving.

3. Hassles

Daily hassles minor irritations and annoyances that are part of our everyday lives and are capable of producing stress (e.g. intolerable coworkers, severe weather, arguments with friends or family).

4. Other Stressors

Stressors can include ***situations*** in which one is frequently exposed to ***challenging*** and ***unpleasant events,*** such as ***difficult***, ***demanding***, or ***unsafe working conditions***. Although most jobs and occupations can at times be demanding, ***some are clearly more stressful than others*** (e.g. police officer, firefighter, social worker, air traffic controller clerical and secretarial work).

8.3. STRESS AND ILNESS

PSYCHOPHYSIOLOGICAL DISORDERS

psychophysiological disorders are ***physical disorders*** or diseases whose symptoms are brought about or worsened by ***stress and emotional factors***. A list of frequently encountered psychophysiological disorders is provided in below.

Types of Psychophysiological Disorders (adapted from Everly & Lating, 2002)	
Type of Psychophysiological Disorder	***Examples***
Cardiovascular	hypertension, coronary heart disease
Gastrointestinal	irritable bowel syndrome
Respiratory	asthma, allergy
Musculoskeletal	low back pain, tension headaches
Skin	acne, eczema, psoriasis

1. Cardiovascular Disorders

The cardiovascular system is composed of the ***heart*** and ***blood circulation system. Cardiovascular system's centrality in the stress response***. ***Heart disease*** is one such condition.

- A major risk factor for heart disease is ***hypertension***, which is high blood pressure. Hypertension forces a person's heart to pump harder, thus putting more physical strain on the heart.
- If left ***unchecked,*** hypertension can lead to a ***heart attack, stroke,*** or ***heart failure;*** it can also lead to ***kidney failure*** and ***blindness***.
- Hypertension is a serious cardiovascular disorder, and it is sometimes called the ***silent killer*** because it has no symptoms—one who has high blood pressure may not even be aware of it.

Many risk factors contributing to cardiovascular disorders have been identified. These risk factors include social determinants such as ***aging, income, education,*** and ***employment status,*** as well as ***behavioral risk factors*** that include unhealthy diet, tobacco use, physical inactivity, and excessive alcohol consumption; obesity and diabetes are additional risk factors.

2. Depression and the Heart

By the early 1990s, evidence began to accumulate showing that depressed individuals who were followed for long periods of time were at increased risk for ***heart disease*** and ***cardiac death*** (Glassman, 2007).

The American Heart Association, fully aware of the established importance of depression in cardiovascular diseases, several years ago recommended routine depression screening for all heart disease patients (Lichtman 2008). Recently, they have recommended including ***depression as a risk factor for heart disease patients*** (AHA, 2014).

3. Asthma

Asthma is a chronic and serious disease in which the airways of the respiratory system become obstructed, leading to great difficulty expelling air from the lungs.

Asthma exacerbation is often triggered by environmental factors, such as air pollution, allergens (e.g., pollen, mold, and pet hairs), cigarette smoke, airway infections, cold air or a sudden change in temperature, and exercise.

- As stress and emotions directly affect immune and respiratory functions, psychological factors likely serve as one of the most common triggers of asthma exacerbation.
- People with asthma tend to report and display a high level of negative emotions such as anxiety, and asthma attacks have been linked to periods of high emotionality.

4. Tension Headaches

A headache is a continuous pain anywhere in the head and neck region.

A number of factors can contribute to tension headaches, including sleep deprivation, skipping meals, eye strain, muscular tension caused by poor posture, and stress.

8.4. REGULATION OF STRESS

I. Coping Styles

Coping refers to mental and behavioral efforts that we use to deal with problems relating to stress, including its presumed cause and the unpleasant feelings and emotions it produces.

Lazarus and Folkman (1984) distinguished ***two*** fundamental kinds of coping: problem-focused coping and emotion-focused coping.

In problem-focused coping, one attempts ***to manage*** or ***alter*** the problem that is causing one to experience stress. They typically involve ***identifying the problem***, considering ***possible solutions***, weighing the ***costs and benefits*** of these solutions, and then ***selecting an alternative*** . As an ***example***, suppose Geele receives a midterm notice that he is failing statistics class. If Geele adopts a problem-focused coping approach to managing his stress, he would be proactive in trying to alleviate the source of the stress. He might contact his professor to discuss what must be done to raise his grade, he might also decide to set aside two hours daily to study statistics assignments, and he may seek tutoring assistance. A problem-focused approach to managing stress means we actively try to do things to address the problem.

Emotion-focused coping, in contrast, consists of efforts ***to change*** or ***reduce*** the negative emotions associated with stress. These efforts may include avoiding, minimizing, or distancing oneself from the problem, or positive comparisons with others ("I'm not as

bad off as she is"), or seeking something positive in a negative event ("Now that I've been fired, I can sleep in for a few days"). For example, if Geele adopted an emotion-focused approach to managing his midterm deficiency stress, he might watch a comedy movie, play video games, or spend hours on facebook to take his mind off the situation. In a certain sense, emotion-focused coping can be thought of as treating the ***symptoms*** rather than the ***actual cause***.

While many stressors elicit both kinds of coping strategies, ***problem-focused coping*** is more likely to occur when encountering stressors we perceive as ***controllable,*** while ***emotion-focused coping*** is more likely to predominate when faced with stressors that we believe we are powerless to change. Clearly, emotion-focused coping is more effective in dealing with ***uncontrollable stressors***..

II. Control and Stress

Control refers to the achievement of desired outcomes.

Perceived control is our beliefs about our personal capacity to exert influence over and shape outcomes, and it has major implications for our health and happiness. For ***example***, researchers in one investigation found that higher levels of perceived control at one point in time were later associated with lower emotional and physical reactivity to interpersonal stressors (Charles, 2007).

Perceptions of control and coping abilities are important in managing and coping with the stressors we encounter throughout life.

III. Social Support

Humans are social beings. We live in families and communities, and we form relationships with other people in a variety of different contexts. When faced with problems, we usually share these with others and give and receive help. This is commonly referred to as social support.

- ***Informational support.*** This refers to the giving or receiving of information or advice that supports problem-focused coping. It has been shown to have a positive effect on health outcomes. The advice given by a grandmother to a new mother about child care is one example. The information sheet given to a patient is another. Health care professionals and self-help groups are important sources of informational support with respect to health and illness.
- ***Emotional support***. Cobb (1976) described this as information that leads individuals to feel cared for, loved and valued. Emotional support provides reassurance and encouragement. It facilitates the individual's sense of self-confidence and self-esteem and is associated with positive health.
- ***Instrumental (tangible) support.*** This refers to the receiving of ***practical help*** to deal with problems. It is essential at the beginning and often the end of the lifespan, and is beneficial in the short term. For ***example***, it may involve caring for a young baby, or giving an older or disabled person assistance with housework, or driving a friend to a clinic appointment, or giving money to enable someone to receive specialist equipment. But too much practical help can lead to dependence.
- ***Social affiliation/social network.*** This refers to a sense of ***belonging***. It usually involves a system of mutual obligations and reciprocal informational, emotional and instrumental social support. A social network of family and friends normally

provides this. Self-help groups can also provide it. Reciprocity, giving as well as receiving help, is an important component of successful social networks

IV. Stress Reduction Techniques

1. Exercise

A common technique people use to combat stress is ***exercise*** . It is well-established that exercise, both of long and short duration, is beneficial for both physical and mental health.

One reason exercise may be beneficial is because it might ***buffer*** some of the deleterious physiological mechanisms of stress.

In the 1970s, Herbert Benson, a cardiologist, developed a stress reduction method called the ***relaxation response technique***. The relaxation response technique combines relaxation with transcendental meditation, and consists of four components:

1. sitting upright on a comfortable chair with feet on the ground and body in a relaxed position,
2. a quiet environment with eyes closed,
3. repeating a word or a phrase—a mantra—to oneself, such as "alert mind, calm body,"
4. passively allowing the mind to focus on pleasant thoughts, such as nature or the warmth of your blood nourishing your body.

The relaxation response approach is conceptualized as a general approach to stress reduction that reduces ***sympathetic arousal,*** and it has been used effectively to treat people with high blood pressure.

2. Biofeedback

Another technique to combat stress, ***biofeedback,*** was developed by Gary Schwartz at Harvard University in the early 1970s.

- Biofeedback is a technique that uses ***electronic equipment*** to accurately measure a person's neuromuscular and autonomic activity—feedback is provided in the form of ***visual or auditory signals.***
- The ***main assumption*** of this approach is that providing somebody biofeedback will enable the individual to develop strategies that help gain some level of ***voluntary control*** over what are normally involuntary bodily processes.
- A number of different bodily measures have been used in biofeedback research, including facial muscle movement, brain activity, and skin temperature, and it has been applied successfully with individuals experiencing tension headaches, high blood pressure, asthma, and phobias (Stein, 2001).